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Help-seeking helps

: help-seeking as a strategy for managing group image

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Juliet Wakefield

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Help-Seeking Helps: Help-Seeking as a Strategy for
Managing Group Image

Juliet Ruth Helen Wakefield

A thesis submitted in fulfilment of the requirements for the degree of
Doctor of Philosophy in Psychology

University of Dundee

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“Two roads diverged in a wood, and I--

I took the one less travelled by,

And that has made all the difference.”

- Robert Frost.

It is with a sense of ambivalence that I write these words. Although I feel a strong sense of achievement (and relief) at completing this thesis, I also feel a sense of nostalgia and even sadness. The last four years have undoubtedly been the best of my life so far: often challenging, sometimes confusing, yet always exciting. Reflecting on the experience in these terms, I feel wistful about this period of my life coming to an end. However, I am also aware of the skills and resources I will take from my PhD. into the next phase of my life. I have enjoyed the experience thoroughly, and I am extremely grateful for the opportunity it has provided me with to grow and progress in many domains of my life (both academic and non-academic). I am also thankful to a number of people for helping me along the way.

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- Juliet Wakefield, June 2011.

Dissemination of Thesis Research

Journal Articles

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Wakefield, J. R. H., Hopkins, N., & Greenwood, R. M. (submitted). Help-seeking helps: Help-seeking as a strategy for managing group image.

Conference Papers

Wakefield, J. R. H., Hopkins, N., & Greenwood, R. M. (2010). Help-seeking helps: How help-seeking can be a group-related strategy. *Paper presented at the British Psychological Society Social Section Conference, University of Winchester, September.*

Wakefield, J. R. H., Hopkins, N., & Greenwood, R. M. (2009). Can help-seeking be a group-related strategy? *Paper presented at the British Psychological Society Social Section Conference, University of Sheffield, September.*

Wakefield, J. R. H., Hopkins, N., & Greenwood, R. M. (2009). Looking the gift-horse in the mouth: Can help-seeking be a group-related strategy? *Paper presented at the Conference on Social Psychology in Ireland, University of Limerick, May.*

Conference Posters

Wakefield, J. R. H., Hopkins, N., & Greenwood, R. M. (2011). Help-seeking helps: Help-seeking as group image management. *Poster to be presented at the European Association of Social Psychology, Stockholm, July.*

Declaration

The candidate is the author of the thesis. Unless otherwise stated, all references cited have been consulted by the candidate. The work of which the thesis is a record has been done by the candidate, and it has not been previously accepted for a higher degree.

Signed: Juliet Wakefield. (Juliet Wakefield)

Date: 13/06/11

Abstract

The aim of this thesis is to investigate the proposition that group members use help-seeking as a strategic tool for managing and enhancing the ingroup's image in the eyes of outgroups. The theoretical introduction outlines and assesses the history of helping-transaction research, beginning with the rich and multi-faceted work carried out by anthropologists and sociologists, before considering how social psychology has addressed this topic. The conclusion from this assessment is that the academic contribution of much of the social psychological helping-transaction research from the 1960s onwards was limited, due to its failure to address: i) the relevance of social groups, and ii) the idea that engagement in helping transactions can be motivated by desires to achieve underlying goals that relate to personal improvement or gain. Although more recent social psychological work investigated these issues, they remain under-studied.

Attempting to address these neglected areas, this thesis adopts a social identity perspective, and conceptualises help-seeking as an image-management strategy. This concept is investigated in the context of a specific phenomenon with the potential to threaten the group's image: a salient meta-stereotype. *Meta-stereotypes* are the stereotypes we believe to be held about our group by outgroups, and are context-dependent and often negative in valence. The prediction is thus made that group members will utilize the act of help-seeking strategically, to attempt to challenge salient negative meta-stereotypes. This is predicted to occur independently of levels of material need.

This hypothesis is tested across seven experiments. Study 1 provides initial exploration of the concept, and suggests that the threat associated with help-seeking

depends on how participants categorize themselves (and thus the help-giver). Studies 2 and 3 provide the first explicit manipulations of meta-stereotype salience in the thesis. Study 2 reveals that encouraging female participants to consider the idea that males perceive females as dependent leads to higher levels of perceived meta-stereotype unfairness than a purely interpersonal context, and that these perceptions of unfairness lead to reduced help-seeking from the outgroup. Study 3 strengthens this finding by shifting to an alternative identity (nationality: Scottish vs. English). It shows that, for participants who act strongly as Scots during the study, being encouraged to consider the idea that the English perceive the Scots as handout-dependent leads to less outgroup help-seeking than either an interpersonal context or an intergroup context without a salient meta-stereotype. This suggests salient meta-stereotypes have effects on help-seeking beyond those produced by a simple intergroup context. Study 4 shows these help-seeking-related effects can be obtained via a more naturalistic meta-stereotype manipulation, and also examines the relevance of the helpers' group membership. Finally, Studies 5, 6 and 7 provide a more in-depth analysis of the key concept of strategy. Together, these last three studies show group members take heed of the *contents* of salient meta-stereotypes, and tailor their strategic stereotype-challenging behaviours depending on these specific contents. Moreover, these studies indicate that the nature of the meta-stereotype contents can sometimes *increase* participants' help-seeking. The General Discussion summarises the thesis' main findings and considers their contribution to the help-seeking literature and the real world.

Chapter 1: Anthropological and Sociological Perspectives on the Helping Transaction

"Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore.
Send these, the homeless, tempest-tossed to me,
I lift my lamp beside the golden door!"

- Emma Lazarus, 1883: Engraved inside the Statue of Liberty, New York, USA.

Our propensity to provide help to individuals in need is sometimes seen as one of the traits that makes us human: a social obligation that any civilised nation has to its own citizens and to people across the world. Just as the welcoming words engraved inside the Statue of Liberty offered hope and assistance to millions of immigrants escaping poverty by entering the USA, the idea that we, as individuals, can behave in ways that enable us to alleviate others' problems is an exciting and life-affirming prospect. Giving help to those less fortunate than ourselves is a central tenet of most (if not all) major religious philosophies, including Christianity, Judaism, Islam, Hinduism and Buddhism to name but a few (Nadler, 2010, p. vii). Even in more secular areas of society, concepts such as Random Acts of Kindness (Wallace, 2004) and charitable events such as Comic Relief and Children in Need have become fashionable ways for individuals to behave prosocially and helpfully towards others.

Perhaps unsurprisingly, we regularly receive powerful messages that extol the virtues of such behaviour. Organisations such as the Carnegie Hero Fund Commission (Bierhoff, 2001) bestow praise and accolades on individuals who have been deemed

to go ‘above and beyond the call of duty’ in providing assistance to others. Children are exposed to a ‘culture of giving’ from before they can read and write (Stirrat & Henkel, 1997), while our cultural history is rich with stories that encourage kind and benevolent behaviour, from the parable of the Good Samaritan to Charles Dickens’ *A Christmas Carol*. Such stories and messages make strong claims about how desirable and praiseworthy prosocial acts are, and how they can represent a source of redemption to even the most immoral individual. Indeed, at first sight, acts of help-giving and help-receiving (i.e., helping transactions) allow us to see human beings at their best: selfless, kind and considerate, and the polar opposite to Hobbes’ depiction of humankind’s natural existence as “nasty, brutish and short” (Finn, 2006, p. 52). It almost seems that such acts can lift us above the status of mere ‘animals’ and allow us to become moral and virtuous beings. It seems hardly surprising, then, that prosocial acts are culturally imbued with almost magical qualities.

Although there is no doubt that acts of helping can represent extraordinary sacrifices and immense selflessness, an analysis that focuses solely on the positivity surrounding help-giving can only ever achieve partial insight into the intricacies of the helping transaction. Once the culturally-defined values and assumptions surrounding the giving and receiving of help are stripped away, it can be seen that this interaction, like all human interactions, is far more complex (and controversial) than it might appear. This issue has been explored in some depth by anthropologists and sociologists, and the present chapter outlines this rich and multi-faceted work, before later chapters move on to consider social psychology’s contribution to this topic.

Motives for Helping Others: Evidence from Anthropology and Sociology

“A gift consists not in what is done or given, but in the intention of the giver or the doer.”

- Seneca.

“Though we laud charity as a Christian virtue, we know how much it wounds.”

- Mary Douglas’ foreword to Mauss’ *The Gift* (1990, p. vii).

Although it is true that there are numerous helping-related lessons and teachings in most religious philosophies, the pro-helping stance taken by most religions comes with an important caveat: that while one should strive to help others, one should also do as much as possible to refrain from being *in receipt* of help. Nadler (2010) reports examples of this idea in various religions, ranging from Judaism to Hinduism and Islam. Implicit in this religious advice is a concept that is familiar to anyone who has ever received assistance: being helped has the potential to make one feel dependent on the giver, and, in turn, to enable the giver to experience power over the individual in need. This sense of superiority usually stems from two different aspects of the helping transaction.

First, the provision of help reinforces the recipient’s incapability and incompetence, since the recipient has a problem or a need that they are unable to solve or alleviate without some kind of external assistance: as van Leeuwen and Täuber (2011, p. 3) note, “helping relations are unequal by nature”. Cultivating such an image can suggest to others that the recipient is weak and helpless: traits unlikely to be valued in any culture (Lee, 2002). Second, the provision of help can trigger an obligation to reciprocate that assistance, either immediately or at some point in the future. The recipient is therefore likely to become indebted to the giver for a period of

time: a situation which also has the potential to place the helper in a position of power over the recipient. These two possible outcomes of the helping transaction are not necessarily mutually exclusive: they may operate in conjunction, and lead to (or maintain) a power differential between the parties.

Strategy: Helping to Manage How One is Perceived in Relation to Others

The important conclusion drawn by anthropologists and sociologists is that this creation of a dependency/superiority relationship is not always simply an unfortunate by-product of others' kindly behaviour. Instead, in a manner somewhat reminiscent of the Greeks defeating the Trojans by giving them a 'gift' of a wooden army-filled horse, help-giving can be deployed in a strategic manner, with the very aim of cultivating unequal status relations. This highlights the first key assumption questioned in this chapter: that help is given for invariably benevolent reasons.

Most famously, this observation regarding strategic giving was made by Mauss, in his seminal sociological and anthropological work "The Gift" (1990). Although the word 'gift' often has quite specific connotations in modern culture, Mauss defined it as any physical object or human service exchanged during social interaction (Carrier, 1991). Mauss' key thesis was that the giving and receiving of gifts represents a *social contract*: the formation of a bond between the two parties. Mauss argued that gifts are *inalienable*: when a gift is given, an element of the giver remains bound up with it, leading to the giver essentially giving away a piece of her/himself. A suitable modern example of this would be American garage sales, where pre-owned items, imprinted with the previous owner's identity, change hands for small 'token' sums of money (Herrmann, 1997). Importantly for Mauss, this 'giving of the self' makes each gift unique, and constrains the recipient by creating a

“mystical link” between the two parties (Matthews, 1999, p. 92) , thereby providing the giver with a “dangerous hold over the recipient” (Sahlins, 1974, p. 150).

In his analysis of gift exchange, Mauss drew on extensive historical, sociological and anthropological evidence to support his claims. Famously, he described the tradition of gift-giving, or *potlatch*, which is practiced by tribes from the Pacific Northwest Coast. He noted that tribal chiefs give extravagant gifts to other chiefs for the sole purpose of gaining and maintaining superiority within the tribal system. Mauss defined such cultures as possessing *gift economies*, where relationships are built between individuals by gift-giving, with no expectation of immediate reciprocation. Instead, recipient chiefs would be expected to give extravagant gifts during the next potlatch period, to achieve the same ends (Stirrat & Henkel, 1997). In this way, giving to others can go beyond a purely benevolent act, and can instead be seen as something that individuals use to enhance their status in relation to others, to gain social capital, or to form bonds between themselves and the receiver.

Such analyses have led theorists to consider the special case of a *free gift*: something Parry (1986) attempted to study in his elaboration and extension of Mauss’ work. A free gift is ‘pure’, since it involves no expectation of reciprocation: a one-way flow of assistance (Stirrat & Henkel, 1997). Mauss was sceptical about the existence of free gifts: he argued that even during potlatch, there would still be an implicit expectation of reciprocation at some point. The norm of reciprocity features in all cultures (Parry, 1986), and has strong effects on people’s behaviour.

In response, Parry (1986) suggested free gifts are likely to be given in more modernized, market-based societies, where the ‘archaic’ role of the gift as a creator of social contracts has been replaced by various economic, social and political institutions. In such societies, Parry argues, individuals will engage in activities such

as giving alms to the poor, where no reciprocation is expected. Similarly, Stirrat and Henkel (1997) considered the idea that private donations to Non-Governmental Organisations (NGOs) such as Oxfam and Christian Aid could be conceptualised as free giving. Since the donor is unaware of the recipient's identity and does not expect financial return after donating, it could be argued that this type of giving is very different to that outlined by Mauss. However, Stirrat and Henkel questioned this conclusion for two reasons. First, even if the private donations to NGOs are examples of free giving, they argued that the aid undergoes so many transformations as it is moved from NGO to NGO and country to country that it soon enters a system more akin to the relationship-forming and bond-forming that Mauss described. This means that, from the point of view of the recipient, something that began as a 'pure' and disinterested gesture quickly becomes entangled in the self-interested world of politics, exchange and reciprocity.

Second, it remains unclear whether 'free gifts' can ever exist in the first place: although private donors do not expect reimbursement for their donation, they expect to receive the feelings of positivity that flow from a 'pure' act of kindness. Furthermore, if others witness such acts, then the giver may hope that their social image and reputation will be enhanced. Even individuals who give alms to the poor are likely to expect something in return, although these benefits are largely intangible (e.g., absolution, or a sense of morality in an immoral world, or even a place in Heaven), (Stirrat & Henkel, 1997). From this perspective, giving becomes something forever entwined with a desire for gain and reciprocation (either tangible or intangible), even in what may appear to be the most altruistic of scenarios. This conclusion has important implications for how the helping transaction (and those who engage in it) are conceptualised and understood.

Giving Gifts to Form Bonds and Define Identities

In the more tangible examples of giving discussed above, it can be seen that the giver can force a specific *identity* onto the recipient, by forming a bond between themselves and that recipient (Schwartz, 1967). This identity will often encapsulate (explicitly or implicitly) the idea of dependence and weakness. Bourdieu (1990) defined this as *symbolic domination*: by accepting a gift, the recipient is accepting (albeit implicitly in some cases) the fact that they possess a lower social status to the donor. Schwartz (1967) provided the example of dominant prisoners selecting specific ‘victim’ inmates to discriminate against, and then ‘forcing’ them to accept desirable gifts such as cigarettes, by hiding the items in their victims’ cells. Such behaviour forces the recipient into a position of inferiority and indebtedness, while the ‘gift-giver’ experiences feelings of superiority and power (and is likely to be perceived by others in such terms). Incidentally, a somewhat similar technique is used by Hare Krishnas soliciting for donations at airports, when they ‘force’ travellers to receive a flower, thereby creating a situation of indebtedness that the traveller feels obliged to rectify (Cialdini, 2007). What may appear initially to be a generous gift may therefore, upon closer inspection, betray motives that are far from ‘pure’.

Just as giving too much can define identities, so can giving too little. Schwartz cites examples of a person being left a very small amount of money in a deceased relative’s will, or an employee being presented with the ubiquitous ‘gold watch’ at their leaving party. As in the previous examples, such behaviour carries an air of strategy rather than benevolence: an indication of displeasure at the relative’s past behaviour or a message of ‘good riddance’ to a lazy worker. Indeed, for the recipient, it may have been better to have received nothing at all. Indeed, Schwarz described gift-giving as “a way of free-associating about the recipient in his presence” (p. 2).

The nature of the gift (and how it is given) can say a huge amount about how the giver wishes to conceptualise the receiver and also (implicitly) him/herself in relation to that receiver. This observation is consistent with Mauss' belief that the key role of giving is to form and manage bonds between people: something most donors know well.

Observations like Schwarz's led Gergen and Gergen (1983) to warn against accepting helping interactions at face-value. Adopting what is essentially a social constructionist approach, Gergen and Gergen argued that it is important to draw conclusions about acts of helping from the *meanings* with which they are imbued, rather than the acts themselves. This involves appreciation of the history between the individuals in question, their unique traits and, importantly, the ways in which they negotiate (and re-negotiate) how acts of giving and receiving are conceptualised. From this perspective, the act of providing help to another only exists within a social framework of shared understandings and meanings, and it is important to take heed of this when analysing instances of help exchange. For instance, the fact that someone was given £1,000 in his father's will may be interpreted as an act of paternal kindness, but when one realises the father was a multi-millionaire and, much to his consternation, his son had accrued years of unpaid gambling debts, a very different picture emerges. In this way, Gergen and Gergen argued that "Repairing an engine, picking up the coins someone has dropped, or plunging a dagger into another's heart may all be classified as acts of help within a particular meaning system" (p. 146). Taking heed of this advice in the context of the current chapter, it is important not to assume that all acts of helping are inherently kind and benevolent. Instead, it is vital to consider the context within which the act occurs, the dynamics between the parties involved, and the type of bond the helping transaction creates between those parties.

Receiving Help from Others: Evidence from Anthropology and the Real World

“A man receiving charity always hates his benefactor- it is a fixed characteristic of human nature”

- George Orwell.

The previous observations suggest that help-givers are aware of the issues of power and indebtedness that are bound up with the act of providing assistance to others. However, this raises an equally important question: what role does the *help-receiver* play in the transaction? The strong focus on the help-giver in the early part of this chapter mirrors the pattern in much of the literature (DePaulo, Nadler, & Fisher, 1983). For good or ill, the helper is perceived as the more interesting party: the one with the power, resources and ability to enact change and promote development. However, there is little doubt that to focus exclusively on the donor provides only a partial account of the helping transaction.

The help-receiver thus remains an under-studied yet vital participant in this interaction, since it is only through the receiver's (willing or unwilling) acceptance of the assistance that donors can achieve the goals described previously. Although important work has been carried out within the help-seeking domain, there remains a pressing need to remedy this dearth in the literature.

One of the key conclusions from the anthropological and sociological research into help-seeking is perhaps unsurprising, given the previous review of helping behaviour: people are often unwilling to seek and accept help. Just as donors are aware of the ways in which they can deploy their aid to constrain receivers (and thereby highlight their own dominance and superiority to others), so receivers are

aware of the potential risks associated with accepting that assistance. The risks involved can be numerous, but are likely to stem from fear of becoming trapped in an unfavourable social contract which places the recipient in a position of dependency. Such a situation is likely to have negative implications for the recipient themselves (e.g., in terms of their feelings of self-esteem and self-worth) and also for their social image. Reinforcing an image of dependency and inferiority has the potential to disadvantage the recipient, and to make it difficult for him/her to secure an image of independence in future interactions (Lee, 2002). ‘Real-world’ examples of people’s unwillingness to seek help abound in the literature, ranging from people experiencing mental health problems (Hocking, 2003; Luhrmann, 2008; Moller-Leimkuhler, 2002) and physical health problems (Galdas, Cheater, & Marshall, 2005; McMullen & Gross, 1983) to students affected by depression and anxiety (Chang, 2007; Ciarrochi, Deane, Wilson, & Rickwood, 2002) and the elderly and house-bound (Newsom, 1999). Indeed, the feeling of being reluctant to seek help is particularly strong in Western cultures: one of the Scottish National Blood Transfusion Service’s recent television appeals (Greenhalgh, 2008) spoke to this reluctance by featuring a woman explaining how difficult she finds it to ask viewers to donate blood for her sick son, because “I was brought up to stand on my own two feet, be strong, independent...never ask anyone for anything”. These observations highlight the second key assumption questioned in this chapter: that help recipients are invariably grateful for and welcoming of the assistance they receive.

‘Pay Me!’

Perhaps the best illustration of this issue regarding recipients’ responses to aid is the interaction between aid donors from developed nations and aid receivers from developing nations. In their investigations into the processes underpinning such

helping transactions, Carr, McAuliffe and MacLachlan (1998) reported on the ‘Pay Me!’ phenomenon, where members of developing communities demand to be reimbursed for participating in aid schemes organised by developing nations. The authors’ accounts of the phenomenon were wide-ranging, from community members wishing to be paid to unload donated equipment and materials from lorries, to academics in developing countries refusing to attend aid-funded conferences unless their daily conference stipend meant they would gain a financial profit by attending. The immediate reaction to reading such anecdotes is likely to be one of disbelief: how can individuals in such dire need be so ungrateful? However, perhaps the anthropological analysis of the gift outlined above can help shed light on this issue, and illuminate it from a new perspective. It therefore seems timely to consider how it might actually *feel* to be helped.

Carr et al. (1998) considered the ‘Pay Me!’ phenomenon as a way for aid recipients to protest against a type of help that could be considered “imposing and demeaning” (p. 18). They argued that, like Mauss’ idea of social bonds and Schwarz’ concept of aid as the forced imposition of a specific identity, help-giving can be conceptualised as a “cultural invasion” (p. 3): an ideological conquering of one group by another. Help recipients may therefore wish to react against this potential identity-threat, and one way of doing this may be to engage in the ‘Pay Me!’ phenomenon.

In analysing this phenomenon, Carr et al. made a point that had not yet been addressed in the anthropology literature. If a ‘gift’ is designed to *take away* important elements belonging to the recipient (e.g., independence, self-esteem, cultural identity, etc.) then it ceases to be perceived as a gift by the recipient. Instead, the donor becomes *indebted* to the recipient, and one way for the recipient to re-establish equality is to demand they be compensated for any aid-management work in which

they engage. Far from being ungrateful, these individuals are painfully aware of the complex relationship that can develop between donor and recipient, and may therefore attempt to reduce the threat of this relationship by imbuing it with a sense of equality and co-dependence.

Imposing Identities

It is also important to note that the identities donors force onto recipients can involve more than just a sense of dependency and inferiority. On the one hand, they can reinforce the idea of difference and distance between the parties (thereby risking recipient alienation), while on the other they can involve the (often incorrect) assumption that the recipient shares key aspects of the donor's beliefs and ideologies (thereby risking offending the recipient). Applying these observations to real-world contexts can shed light on the stories behind the headlines of various aid-related news stories. For instance, it has been suggested in the British media that the 'novelty' Christmas presents of goats and building materials that people from developed nations buy for developing communities on behalf of their friends are often perceived as "demeaning and patronising" by recipients (Busari, 2007, n.p.). There is the suggestion that by giving such items, the identity of 'other' is forced onto recipients: it suggests there is little commonality between donors and recipients, and that the recipients share none of the donors' dreams or hopes. It is therefore unlikely that such a dynamic would foster the sense of equity recipients crave.

Similar conclusions can be drawn when considering cases of so-called 'tied aid', which is given on the condition that it is spent in certain ways (Kemp & Kojima, 1985). Although such aid is often given with the explicit aim of benefitting the donor as well as the recipient (e.g., by forcing the recipient to only use the aid to buy goods from the donor country), sometimes the conditions require that recipients endorse and

adhere to the values of the donors: values with which they may not always agree. This was illustrated when Brazil's government refused 40 million dollars in United States Agency for International Development funds to support AIDS projects, because it came with the requirement that "all grantees take a pledge not to knowingly promote, support, or advocate the legalization or practice of prostitution" (*International Gay and Lesbian Human Rights Commission*, 2008, n.p.). Accepting the aid would have forced the Brazilian government to enforce intolerant attitudes towards prostitution, which is legal in Brazil. Furthermore, some key Brazilian AIDS campaigners belong to sex workers' rights groups, so adopting an anti-prostitution stance would risk alienating these important individuals. When the aid transaction is considered from the recipients' perspective in this manner (and the identity which they would be required to adopt if they received the aid becomes clear), it is perhaps unsurprising that aid is often refused.

Taking these issues on board, Gergen and Gergen (1971; 1974) carried out interviews with donors and recipients across the world. From these responses, they concluded that there are a number of factors which, regardless of cultural differences, recipients are likely to consider when they assess their attitudes towards accepting help from a donor. Many of these factors relate to the elements discussed above, such as the extent to which the aid would be likely to constrain the recipient and the extent to which the recipient's self-esteem will suffer after being helped (Gergen & Gergen, 1971). Interestingly, such factors not only affect attitudes towards receiving help in the future: they also affect the perceived effectiveness of previous and current aid projects, thereby colouring relations between the parties in the past, present and future (Gergen & Gergen, 1974). This work therefore highlights the fact that, regardless of absolute levels of need, recipients are acutely aware of the complexities of the helping

transaction, and are likely to consider multiple factors before deciding whether the benefits of receiving aid outweigh the numerous potential costs. Aid project managers neglect this observation at their peril.

Concluding Comments and Lessons to Learn

As well as reviewing some of the key anthropological and sociological investigations of the helping transaction, the present chapter aimed to address two popular misconceptions, both of which will be explored in more depth at later points in this thesis. First, that the act of providing help or gifts to others is not always born out of a purely “God-like disposition” (Hopkins et al., 2007, p. 777). Instead, the anthropological theory and sociological case-studies reported here have suggested that donors and helpers often have their own (highly strategic) agendas. These can go far beyond the well-known concept of tied aid, and can involve something much more fundamental: giving help can represent physical and ideological *oppression* of the recipient. By creating bonds between donor and recipient, the donor can claim superiority, enforce reciprocity and even demand that the recipient modifies their own identity. While this makes help-giving a powerful way to manage one’s social image and relative status, it also means that the act of receiving help is likely to be difficult and traumatic for those in need. As George Orwell’s quotation suggests, such events and strategic motivations set the stage for huge amounts of conflict, jealousy and resentment.

This observation leads to the second assumption that was challenged in the present chapter: that help-recipients are always happy and grateful for any assistance they receive. A major reason why this assumption has rarely been challenged is the general lack of recipient-based work in the helping transaction literature. In many cases, this vitally important party has almost been an after-thought. However, as the

numerous case studies and anecdotes above suggest, the life of an aid recipient is often not a happy one, and such discontent has the potential to make people reticent about receiving assistance. Since it is all too clear that donors and helpers often possess their own agendas, it is perhaps unsurprising that recipients might also have strategic motivations. While a desire for a sense of honour, equality or self-efficacy may seem somewhat basic, these elements are the cornerstones of human existence. Although it was proposed at the outset of this chapter that the act of giving is something that makes us human, it also seems fair to state that traits such as dignity hold a similar status. Indeed, Hobbes argued that the desire for dignity and honour is one of the elements that divides humans and animals (Hobbes, [1651] 1967). It seems ironic that the ‘humanitarian’ act of helping can strip the recipient of the very traits that make them human.

The case-studies outlined in the present chapter have undoubtedly given aid agencies and project managers much food for thought. However, the fact remains that the problematic interactions described here can be (and are) reproduced all over the world: between countries, within countries and between individuals. Indeed, it is the ubiquitous (yet complex) nature of the helping transaction that has made it such a fascinating topic to social psychologists for the last forty years, leading to it inspiring a large and varied domain of research. The following two chapters thus examine whether social psychology’s analysis of the helping transaction has helped to contribute to the rich anthropological and sociological research agenda reviewed in the present chapter.

Chapter 2: Social Psychological Perspectives on Help-Giving

The contribution of anthropology and sociology to our understandings of the helping transaction was reviewed in the previous chapter, and the focus on help-givers' and help-receivers' strategic motivations within this work was considered. However, since this thesis involves a social psychological perspective, it is also important to consider social psychologists' contribution to this domain, and whether they have provided insights that move beyond those obtained by the work of anthropologists and sociologists.

Although the key focus of this thesis is help-seeking (rather than helping), analysing research concerning the latter helps to highlight and crystallize many of the assumptions and trends of social psychology as a discipline. Moreover, by focussing on the act of helping, it is possible to observe the traits and qualities (implicitly) attributed to helpers within social psychology (e.g., power, capability, influence, etc.); traits and qualities which, by extension, are (implicitly) denied to help-seekers. By examining helping-related research, it is therefore possible to learn more about how the domain conceptualises both parties in the helping transaction. With this in mind, the present chapter investigates the contribution of social psychology to our understandings of help-giving, while the following chapter investigates the contribution of social psychology to our understandings of help-receiving.

Although the anthropological and sociological research outlined in Chapter 1 highlights the subtle and complex issue of strategy within the context of help-giving, this was not a key element of the social psychological research agenda when helping became a topic of interest to the discipline in the 1960s and 1970s. The impetus for this interest is usually attributed to rare, headline-grabbing (and often morbid) stories,

such as the horrific murder of Kitty Genovese in New York in 1964. Newspapers alleged that 38 witnesses heard Genovese's screams yet did nothing to help, leading to public outcry and a re-energised desire to investigate both the helping transaction and the circumstances in which it breaks down (although, as Manning, Levine & Collins (2007) and Levine & Cassidy (2010) note, the true events of that night remain a contentious topic).

The social psychological research on helping inspired by events such as the Genovese murder involved three notable aspects that distinguished it from the anthropological and sociological work discussed in Chapter 1. First, it highlighted researchers' pre-occupation with one particular type of helping: intervening in emergencies. Second, it involved a highly interpersonal focus: helpers and help-receivers tended to be viewed as unique individuals, leading to researchers neglecting the significance of social group memberships for the helping transaction. Third, the work often failed to consider the idea of strategy: that people can possess underlying motives for engaging in helping transactions that may not be initially obvious. Considered in these terms, the social psychological helping research carried out since the 1960s can be seen as possessing important shortcomings, which limited the contribution it could make to the rich anthropological and sociological research outlined in Chapter 1.

These limitations are epitomised in one of the key helping-related works to emerge from the domain during this period: Latané and Darley's (1970) *The Unresponsive Bystander*. This prize-winning book on bystander intervention was written with the Genovese case in mind, and sparked high levels of interest in emergency intervention research. One of the book's core ideas was the *diffusion of responsibility hypothesis*, which offered hope to the public by suggesting that groups

of bystanders do not fail to intervene because they are uncaring ‘animals’, but because the presence of large numbers of people reduces the relative level of responsibility experienced by each individual. This, coupled with the phenomenon of *pluralistic ignorance* (when people misinterpret the situation as being trivial because those around them are doing nothing, so they do nothing too), apparently leads to the *bystander effect*, where individuals are less likely to help when in large groups of non-helping bystanders. Latané and Darley used this analysis to explain why nobody helped Genovese, and why participants were so reluctant to provide help in their own field experiments.

Latané and Darley also used their book to develop their now-famous decision model of bystander intervention, where they proposed that individuals proceed through a number of stages before making the final decision to help (such as noticing the event, correctly defining it as an emergency, deciding whether they possess the skills required to help and taking actual responsibility for helping). The authors devised various field experiments to investigate these stages, and to isolate the factors that make helping more or less likely. These pioneering studies inspired a large number of researchers to expand and develop Latané and Darley’s original ideas, particularly the concept of the bystander effect (Latané & Nida, 1981). The effect has been found to occur in a wide variety of situations, from subway trains and lifts to help requests sent via email and within Internet chat-rooms (Barron & Yechiam, 2002; Blair, Thompson, & Wuensch, 2005; Latané & Dabbs, 1975; Markey, 2000; Piliavin & Piliavin, 1972).

However, consistent with the limitation outlined above concerning the strongly interpersonal nature of this research, it can be argued that this focus on the bystander effect led to an (apparently) obvious fact being neglected (the relevance of

which is discussed in depth in Chapter 5): that people have the potential to form and belong to *groups*, and that these groups may have a crucial role to play in phenomena such as emergency intervention (e.g., Levine, Prosser, Evans, & Reicher, 2005). Furthermore, by being strongly-focussed on emergency intervention (which is only one small aspect of helping behaviour, Bierhoff, 2001), and by neglecting the fact that help-giving can reflect strategic attempts to achieve underlying aims, this work suffered from important limitations which reduced the contribution that social psychology could make to the rich, engaging and complex work emerging from the domains of anthropology and sociology. While it is important to recognise that Latané and Darley's intricate field experiments (and the work they inspired) helped to reinvigorate the topic of helping and to place it on the social psychological research agenda, it should also be remembered that their account of help-giving can be seen as partial and one-dimensional.

These limitations are also apparent in much of the other social psychological work on helping that took place during this period. For instance, most of this research was focussed on the individual differences that affect people's likelihood of helping others, particularly (but not exclusively) in emergency situations. Indeed, a wide variety of models and theories were postulated in an attempt to shed light on this element of the helping transaction. Although some of this work did consider the relevance of social processes (such as investigations into the role played by social norms in helping transactions: see later), most of the research conceptualised helpers and help-receivers as unique individuals, and analysed the helping transaction at face-value (i.e., it did not involve an appreciation of the strategic side of helping transactions: a key element of the anthropological and sociological research discussed in the previous chapter).

Helping as a Product of Individual Differences

One of the key features of the helping research agenda in social psychology during this period involved considering how individual differences and specific characteristics can affect the likelihood of help being given. Such research considered the personal traits of both helpers and help-receivers, and how these traits may make helping-giving more or less likely to occur. It is important to note that (as mentioned in the Introduction to this chapter) this work involves a strong focus on the virtuous and positive traits possessed by the helper (e.g., kindness, compassion, capability, possession of important resources, etc.). This focus has the potential to imply that help-recipients *lack* such traits, and instead possess various weaknesses (e.g., dependency, incapability, lack of possession of important resources, etc). As mentioned previously, this assumption has generally led to the role of the help-recipient in the helping transaction being under-explored and under-valued in social psychology (DePaulo et al., 1983), (although see the next chapter for an analysis of the help-seeking literature which includes examination of theories that attribute more agency-related traits to help-receivers).

Helper Traits

Personality. One of the key questions for early helping researchers to consider was whether a ‘helpful personality’ exists: a collection of attributes and dispositions that would make someone more prosocial by their very nature. Although investigating the influence of personality on behaviour without any consideration of environmental effects is problematic (Pinel, 2006), a number of conclusions have been reached regarding personality traits associated with helping. Oliner’s (1992) groundbreaking investigation into the individuals who saved the lives of Jews during World War Two (often at great risk to themselves) highlighted a number of these elements. For

instance, these individuals were likely to have an internal locus of control and high levels of self-efficacy, providing them with the belief that they had the ability to enact change, and that they would be successful in their endeavours. They were also more likely to accept responsibility for their actions and for the well-being of individuals around them. These findings were supported in a modern context by Lee, Kang, Lee and Park (2005), who interviewed sixty ‘exemplary altruists’. All of them were found to possess high levels of integrity, self-esteem and autonomy, as well as strong feelings of empathy and social responsibility.

Researchers investigating prosocial behaviour through public goods games (which involve participants deciding how many of their personally-owned tokens to contribute towards the sum of tokens shared by the group) have also suggested that a prosocial orientation might exist. van Lange, Bekkers, Schuyt and van Vugt (2007) found that participants who behaved in a cooperative manner during public goods games (i.e., they attempted to increase the outcome for both themselves and their partner/s in a fair manner) gave more to charities (and supported a wider range of charities) than participants who behaved in a competitive or individualistic manner. These individual differences in orientation tended to endure across various situations. While it is likely that inborn traits interact with environmental factors to promote helping (Oliner, 1992), there is therefore evidence to suggest that some people are inherently more prosocial than others.

Empathy and perspective-taking abilities. Although conceptualised as only one element of the ‘prosocial personality’, empathy has received much attention from researchers interested in helping behaviour. Batson’s Empathy-Altruism Hypothesis (e.g., Batson et al., 1991) has been a central theory in this field. Contrary to much research, Batson and colleagues argued that true empathy exists, and has the potential

to drive helping behaviour. The hypothesis suggests that an awareness of another's suffering can lead to *empathic concern*, a pure, true and tender-hearted interest in the other's welfare, which involves perspective-taking, or imagining oneself 'in their shoes'. Perspective-taking can have powerful psychological effects: for instance, it can lead to the suppression of stereotypes and increased positive evaluations when thinking about the elderly and ethnic minorities (Galinsky & Moskowitz, 2000). Batson and colleagues argued that perspective-taking leads to completely empathy-motivated and 'pure' helping behaviour, with no thought for one's own welfare. For instance, in one of many tests of the model (Batson, O'Quin, Fultz, Vanderplas, & Isen, 1983), Batson asked participants to observe a confederate on a television screen, as the confederate apparently received electric shocks as part of a learning experiment. After admitting she felt distressed, the confederate explained she would continue if she had to, but that the participant could swap places with her if they wished, or the experiment could be terminated. The researchers found that participants in the high empathy condition (i.e., those asked to imagine what the confederate was going through) were likely to take her place, whereas participants in the low empathy condition were more likely to simply end the experiment. It therefore seems that empathy can make individuals help others in quite remarkable ways, with little or no thought for their own safety or wellbeing.

However, since much of this work conceptualised the helping transaction in interpersonal terms, it generally neglected the relevance of group memberships to the cultivation and expression of empathy, and the implications this has for helping behaviour. This issue is discussed in Chapter 5.

Mood. Investigating how individual differences in mood affect helping was also a key element of 'traditional' social psychological research. Generally, positive

moods are believed to increase the likelihood of helping, possibly because they affect how individuals relate to others, and have the potential to increase feelings of personal competence (Dovidio, 1984). On the basis of these observations, a wide variety of researchers have attempted to induce positive moods in participants (often in naturalistic settings), and then studied the effects of this induction on helping behaviour. For instance, North, Tarrant and Hargreaves (2004) found that playing uplifting music (as opposed to annoying music) encouraged more gym-users to volunteer to distribute charity leaflets, while Baron (1997) found that shopping-mall users behaved more helpfully towards a same-sex confederate in the presence of pleasant smells such as cookies (the scent of which also increased levels of positive affect). These results suggest that the positive relationship between mood and helping is robust, and can be observed in a wide variety of real-world situations. Nevertheless, other theorists suggest that positive moods may actually make individuals less able to *notice* emergencies and problems in the first place, as negative events are not in keeping with their current positive mind-set, so are less likely to be attended (Cialdini, Kenrick, & Baumann, 1982).

Sex. The relevance of the potential helper's sex played a key role in much social psychological research, since people tend to help in ways that conform to socially-defined gender roles (Eagly & Crowley, 1986). Before researchers were aware of this, it was often believed that women were less helpful than men. In reality, this conclusion was reached due to the fact that, as mentioned previously, the primary focus of much of the research had been on emergency intervention (Belansky & Boggiano, 1994). 'Risky' emergency helping is indeed a domain in which males are more likely to provide assistance, since it incorporates the male gender roles of strength and heroism in the face of danger, and signals male virility (Griskevicius et

al., 2007). Eagly and Crowley (1986) critiqued the pre-occupation of both researchers and society in general with emergency helping, arguing that it leads to the important contributions of female helpers being neglected. Indeed, in their meta-analysis (which they used to develop their social role theory of helping behaviour), Eagly and Crowley came to the conclusion that males and females help to an equal extent, but that the two sexes are likely to help in different situations. Whereas males are more likely to intervene in emergencies (which tend to involve high levels of risk, an audience and the chance to help a needy stranger), females are more likely to provide longer-term, emotional-based helping, which involves nurturing and empathic concern for others. Volunteering, counselling friends or caring for elderly neighbours and relatives are types of helping more often observed in females, as these activities are more consistent with the female gender role. Belansky and Boggiano (1994) supported Eagly and Crowley's theory with their questionnaire study, where they created imaginary situations in which the person in need was a friend, and levels of threat and risk were low (i.e., conditions suited to female gender-role helping). Here, women were indeed more likely to help than men.

It therefore seems that the conclusion that women are less helpful than men is unfounded, and due simply to the traditional social psychological literature adopting an overly-narrow definition of 'helping' (unlike the anthropological and sociological research discussed in Chapter 1), as well as society placing a higher value on dangerous emergency helping than non-dangerous longer-term helping (e.g., the Carnegie Hero Fund Commission in America, Bierhoff, 2001). Nonetheless, there will be individual differences in the extent to which males and females adhere to gender roles, and the extent to which their specific culture promotes and emphasises such

roles. It is therefore unlikely that Eagley and Crowley's findings are upheld consistently across all men and women in all cultures.

Recipient Traits

Attractiveness. Social psychologists argued that just as the potential helper's personal traits have the ability to affect the likelihood of help being given, so too do recipients' traits. For instance, there is work to suggest that individuals in need who are perceived to be 'attractive' on some dimension tend to receive more help than 'unattractive' individuals. Benson, Karabenick and Lerner (1976) found that participants were more likely to post a 'lost' university application form (complete with a passport photograph) back to physically attractive applicants, compared to unattractive ones. Although this effect may be related to feelings of attraction, which foster liking towards the person in need, it may also relate to gender stereotypes, at least when women are being helped. Wilson and Dovidio (1985) found that a physically attractive woman dressed in 'feminist' attire was less likely to receive assistance when she requested one dollar from strangers than a physically attractive woman dressed in 'traditional' attire. When the woman was unattractive, however, her style of dress made no difference to the likelihood of her being helped. This suggests that attractive women may only be more likely to receive help than unattractive women when they are perceived to adhere to gender norms.

Perceived similarity to helper. Recipient attraction can also be created by increasing perceived (interpersonal) similarities between the potential helper and the person in need. Although this sense of similarity may be born out of simple events, such as the needy person having the same first name as the potential helper (Guéguen, 2003), researchers have also considered more elaborate ways in which similarity can be fostered. For instance, van Baaren, Holland, Kawakami and van Knippenberg

(2004) found that mimicry of participants' behaviour increased their prosociality, both towards the mimicker and towards nearby non-mimickers, while van Baaren, Holland, Steenaert and van Knippenberg (2003) and van Baaren (2005) found that waitresses who mimicked their customers were given more tips than waitresses who did not mimic, even when the waitress was naïve to the experimental hypothesis. It therefore seems that when people observe their own actions being mimicked by someone else, the sense of similarity and attraction they experience is powerful enough to make them behave more helpfully towards the mimicking individual (and anyone in the local environment). These results reinforce the powerful effects that donor/recipient similarity can have on the helping transaction.

Nonetheless (and similar to the critiques levelled earlier at researchers investigating other helping-related issues), one issue that has often been neglected by those researching interpersonal attraction in the context of prosocial behaviour is how attraction can also be fostered by individuals sharing group memberships, and a sense that the person in need is 'one of us' (e.g., Sole, Marton, & Hornstein, 1975). Again, this important issue is examined in Chapter 5.

Perceived responsibility for plight. It is perhaps unsurprising that social psychologists have concluded that individuals who are deemed (rightly or wrongly) to be responsible for their own plight are less likely to receive assistance. This has been shown to be the case both in the short-term (i.e., individuals who have injured themselves and are presumed to be drunk, compared to those who seem to have simply tripped over), and in the long-term (i.e., individuals who contracted HIV via unsafe sex, compared to a tainted blood transfusion), (Higgins & Shaw, 1999; Weiner, Perry, & Magnusson, 1988). The same phenomenon has also been observed in group-related research: Zagefka, Noar, Brown, De Moora and Hothrow (2011) found

participants were more likely to blame a group suffering from the effects of a disaster for their own plight if the disaster was perceived as human-caused (e.g., famine caused by flooding due to poor dam-building and corrupt governance) rather than nature-caused (e.g., famine caused by flooding due to unexpectedly large storms bursting well-made dams). In turn, Zagefka et al. found that these perceptions of blame led to beliefs that members of the group in question were unwilling to help themselves, which in turn led to reduced willingness to donate money to those affected by the disaster.

Sex. A final personal factor that affects the likelihood of being offered help is the person's sex. Generally, women are more likely to receive help than men (Eagly & Crowley, 1986; McGuire, 1994). This may be due in part to the finding that women are more likely to seek help than men are, (see Chapter 3, e.g., McMullen & Gross, 1983; Shek, 1992), but may also relate to the female gender stereotype of dependency, and the belief that women require more assistance than men. In support of this idea, Dovidio and Gaertner (1981) found that women in subordinate roles (relative to the participants in the study) were more likely to receive help from male and female participants than women in supervisory roles, while Vrugt and Nauta (1995) also found that women in subordinate roles who were described as having low cognitive abilities were more likely to receive help from male participants than women in subordinate roles who were described as having high cognitive abilities. It therefore appears that men are more benevolent towards women who adhere to traditional female gender roles of low status and low ability, which supports Wilson and Dovidio's (1985) work on feminist attire mentioned earlier.

Additional research has concluded that men who endorse and engage in chivalrous behaviour are often particularly motivated to help women, as they consider

it their duty to assist individuals whom they deem to be weak and vulnerable (Viki, Abrams, & Hutchison, 2003). This attitude (which can be endorsed by both sexes) is known as *benevolent sexism* (Barreto & Ellemers, 2005), and correlates positively with more overt and damaging *hostile sexism* (Glick, Diebold, Bailey Werner, & Zhu, 1997).

Helping as a product of individual differences: Conclusions. Although the research outlined in this section helped reveal important elements of the help-giving process, it was not without its limitations. First (as mentioned at the outset of this chapter), this work focuses strongly on the positive traits possessed by helpers, including qualities such as kindness and sympathy. This is a problematic assumption: as noted in the previous chapter, it may be the case that helpers are not always motivated to provide help for entirely benevolent reasons. Moreover, this focus on the positive traits possessed by helpers suggests (albeit implicitly) that help-seekers *lack* these traits, and instead possess negative qualities such as dependency and incapability. Such assumptions have contributed to the relative lack of interest paid to help-seekers in social psychological research (DePaulo et al., 1983).

This work possesses a number of other limitations. For instance, by focussing strongly on individual differences and personal traits (as well as placing high levels of emphasis on emergency intervention), this work neglected the themes of social context and strategy that were integral to the rich and complex anthropological and sociological work discussed in Chapter 1. Indeed, this rather reductionistic focus means it is difficult to place social psychology's contribution to helping transaction research within the multi-faceted and nuanced framework outlined in the previous chapter. Nonetheless, one element of the literature does speak to this important issue (at least to some extent): the idea of helping as a social norm.

Helping as a Social Norm

Norms are essentially ‘rules’ that provide us with information regarding the ‘correct’ way to behave in social situations. Behaviour is likely to be met with social approval if it adheres to these norms, so norms tend to have a strong influence on people’s behaviour in social situations (Hogg & Reid, 2006). Due to the strong social element inherent in helping behaviour, a number of powerful and well-known helping-related norms exist, such as *reciprocity* and *equity* (Schroeder, Penner, Dovidio, & Piliavin, 1995), and an important aspect of helping research in the 1960s and 1970s involved investigating the impact of these norms on participants’ behaviour. As noted in Chapter 1, there is strong evidence to suggest that these types of norms are universal: when we help others, we generally expect to be helped in return at some later point, thereby restoring a sense of equity to our interpersonal interactions (Schwartz, 1967). Indeed, when Kruger (2003) used structural equation modelling to analyse the factors that predict helping in risky emergency situations, reciprocal altruism (i.e., the belief that the act of altruism will eventually be repaid) was by far the strongest predictor.

Unfortunately, the major problem with a norm-based analysis of helping behaviour is that norms can often be vague and contradictory; for example, ‘do to others as you would be done by’ and ‘don’t talk to strangers’ are both widely-accepted but opposing helping-related norms (Darley & Latané, 1970). Cialdini and his colleagues (Cialdini, Kallgren, & Reno, 1991; Cialdini, Reno, & Kallgren, 1990) attempted to solve this dilemma with Focus Theory, by arguing that a norm will only affect behaviour when it is *salient*, or focussed, in the current context. For instance, the authors found that participants were more likely to litter in a heavily-littered area than a clean one, as a clean area makes the anti-littering norm maximally salient.

Nonetheless, it is important to note that (similar to bystander effect researchers neglecting the fact that bystanders belong to social groups), many of the prosocial norm researchers failed to consider the point that multiple social groups exist *within* a larger society, and that each of these groups may encourage their respective members to adhere to specific prosocial norms (e.g., Levine, Cassidy, Brazier, & Reicher, 2002). This means that the effects of prosocial norms are likely to be more complex than initially thought; an issue discussed in Chapter 5.

Concluding Comments

Although this brief review and analysis of the helping literature that emerged from the 1960s onwards cannot cover every aspect of this huge domain, it highlights some of the key issues and questions at the forefront of this work. By gaining understanding of the roles played by individual differences and personality traits in the helping transaction and by considering situations in which social norms are likely to affect behaviour, researchers gained a clearer perspective on issues such as bystander behaviour and emergency intervention. These conclusions also had important practical implications: by investigating such behaviours, perhaps future Kitty Genoveses could be spared her tragic fate. This is a large and complex goal, and it is unlikely that there are simple paths to its achievement. Nonetheless, this tradition of research provided some comfort to those who were shocked by incidents such as the Genovese case, and inspired researchers to continue to investigate key helping-related questions into the twenty-first century. These achievements should not be underestimated.

However, the key aim of the present chapter was to highlight the important limitations of these avenues of research, and to suggest that the high benchmark set by anthropologists and sociologists in the helping transaction domain (see Chapter 1)

was not met by ‘traditional’ social psychological research. By becoming pre-occupied with emergency intervention and by adopting a staunchly interpersonal perspective which did not enable consideration of strategy, social psychologists limited their ability to appreciate the complexity and richness of the helping transaction: something easily observed in the anthropological and sociological research. However, as hinted at throughout this chapter, more recent social psychological research has involved appreciation of these neglected issues, and future chapters investigate this important work.

While this chapter has indicated that much of the ‘traditional’ social psychological helping-transaction research focussed on the help-giver (the ‘important’ party possessing numerous positive traits, as well as the skills and resources required to help others), a small (yet significant) group of researchers did explore the other side of the story: the *help-receiver’s* account of the helping transaction. This interest fuelled its own tradition of research, and led to numerous theories of help-seeking and help-receiving being devised, as well as motivating consideration of one of the key issues discussed in Chapter 1: why individuals in need are often to unwilling to seek and accept help. The next chapter reviews and analyses social psychology’s contribution to our understanding of this important (yet under-studied) behaviour.

Chapter 3: Social Psychological Perspectives on Help-Seeking

While the anthropological and sociological literature discussed in Chapter 1 involved considering the helping transaction from the perspective of help-receivers, their important role has remained somewhat unappreciated in social psychology. Many introductory social psychology textbooks devote a whole chapter to helpers and helping, with help-receivers obtaining a small mention towards the end (e.g., Baron, Byrne, & Branscombe, 2006). In some ways, this is unsurprising: as mentioned in Chapter 1, the individual who possesses the power, resources and skills to enact change could easily be defined as the more interesting of the two parties involved in the transaction. Bystander research in the 1960s and 1970s (e.g., Latané & Darley, 1970) paid almost no attention to how it *felt* to receive help when one experienced an emergency; if anything, the assumption was that help recipients should consider themselves to be lucky and privileged, and should accept the aid with open arms. After all, there are so many factors that could potentially prevent a victim from being helped at all (Hirschberger, Ein-Dor, & Almakias, 2008), so any assistance offered should thus be gratefully and unquestioningly received. However, the limited (but growing) help-receiving literature of the 1970s soon suggested that this assumption was often far from the truth, and highlighted how seeking and receiving help can carry large (and potentially inhibitory) social costs (Lee, 2002).

Nowhere is this more evident than in the anthropological findings discussed in Chapter 1. Reflecting on such observations encouraged social psychologists to investigate why people often experience such overwhelming reluctance to both seek and receive help. Indeed, from the 1970s to the present day, this has been one of the key questions that researchers working in the field of help-seeking have attempted to

address. This chapter reviews some of the key models and theories social psychologists devised in a bid to understand this issue, with the ultimate aim of the chapter being to assess the contribution that social psychology has made to our understanding of help-seeking and help-receiving (and whether this contribution extends the insights provided by anthropology and sociology). Perhaps unsurprisingly, one of the key criticisms levelled at the social psychological investigations of helping assessed in Chapter 2 is also made with reference to the help-seeking literature in the present chapter: that it neglects the role played by social groups in affecting help-seeking and help-receiving behaviour.

Social Psychological Theories of Help-Seeking

Threat to Self-Esteem Model

One of the most famous and influential of these help-seeking models (which went on to inspire a large amount of research) was Fisher and colleagues' Threat to Self-Esteem model (e.g., Fisher, Nadler, & Whitcher, 1978). The authors essentially argued that help has a two-faced "Janus-like quality" (Nadler, 2010, p. 271): as well as being supportive, aid can also incorporate *threatening* elements. This threat is especially damaging to the individual's self-esteem, since it highlights one's inferiorities, incompetence and dependence (Lee, 2002). The authors suggested that whether help is perceived as predominantly supportive or threatening depends on a number of recipient-based, helper-based and situational characteristics, which tend to interact to produce rich and complex helping transactions. A major aim of help-seeking research throughout the 1970s was to investigate how these factors might increase or decrease the likelihood of help being sought or accepted. This endeavour can be seen as largely similar to attempts made by helping researchers to isolate individual differences that have the potential to affect the likelihood of help being

given. Moreover, it suffers from the same limitation as this work: it fails to appreciate that while help-receivers and helpers are unique individuals, they are also members of social groups, and that these group memberships have implications for how acts of help-seeking are conceptualised and understood (an idea considered in later chapters).

Similarity to helper and self esteem. The interpersonal focus of this work is especially evident in one particular helper-related trait investigated within the context of the Threat to Self-Esteem Model (and also investigated within the helping literature discussed in Chapter 2): the implications of perceived levels of similarity between helper and recipient. Much of this work was based on Festinger's Social Comparison Theory (1954), where Festinger suggested that we are most influenced by those we deem to be similar to us, and, moreover, that similar people highlight our feelings of inadequacy and inferiority via *comparison stress*. Supporting the theory, Fisher and Nadler (1974) found that receiving aid from someone deemed to be attitudinally similar (rather than dissimilar) to oneself led to decreases in self-esteem and self-confidence. However, as with the helping research presented in Chapter 2, it is important to note that feelings of similarity such as these may also be fostered by highlighting the group memberships one shares with others (e.g., Levine et al., 2002): something this tradition of research largely failed to address. The relevance of group relations to help-seeking is examined in Chapter 6.

Expanding their research on interpersonal similarity to consider the key issue of self-esteem, Nadler, Fisher and Streufert (1976) found that help-receiving participants with high levels of self-esteem experienced more positive affect, rated their own intelligence more highly and evaluated themselves more positively if the helper was deemed attitudinally dissimilar to the participant, rather than attitudinally similar. The authors thus concluded that receiving help from similar individuals is

only threatening to those with high levels of self-esteem, a conclusion also supported by Nadler (1987). This finding is consonant with the *consistency hypothesis* (e.g., Nadler & Mayseless, 1983), which suggests that high-self esteem individuals are more threatened by receiving help than low self-esteem individuals, because help-seeking is inconsistent with high self-esteem individuals' perceptions of themselves as competent people. Help-seeking *is* consistent with the self-image of low self-esteem individuals however, so levels of perceived threat remain low for such people. Indeed, these individuals may be most likely to become highly dependent on help, because they do not perceive long-term help-seeking as threatening to their self-image (Nadler, 2010).

Nadler, Altman and Fisher (1979) obtained evidence for the consistency hypothesis by manipulating participants' self-esteem (by providing them with fabricated performance-related feedback). On the one hand, they found that participants who were given positive feedback perceived a subsequent helping experience as threatening, compared to those who received no help (as indicated by self-evaluations and levels of affect and self-esteem). On the other hand, participants who received negative feedback found a subsequent helping experience to be supportive (compared to those who received no help). This study highlights the important role that self-esteem (whether chronic or experimentally-induced) can have on recipients' perceptions of the helping transaction.

Nadler and Mayseless (1983) suggested that the consistency hypothesis is only relevant in cases where the task or domain in question is ego-central (or particularly relevant to the help-recipient's personal identity). When the domain is less ego-central, it is more likely that *low*-self-esteem individuals will feel the greater threat,

because their already-present vulnerabilities are exaggerated (an effect known as the *vulnerability hypothesis*).

Ego-centrality of task. The importance of the ego-centrality of the task (a situation-based influence on help-seeking behaviour) was also emphasised by Nadler (1987). He found that an attitudinally-similar helper offering help on an ego-central task led to particularly low levels of help-seeking, especially for individuals with high self-esteem. In a ‘real-world’ context, Lee (2002) found that when a new computerised medicine-ordering system was installed in a busy teaching hospital, those who deemed medication-ordering to be more central to their job (i.e., professionals in the medical department) sought less help on how to use the system than those who deemed it less central (i.e., professionals in the surgical department). This supports the idea that help-seeking on ego-central tasks may be particularly threatening. Of course, this result may relate more to the idea that medication ordering is a central aspect of the *group identity* of professionals working in the medical department, and that seeking help on such a group-defining issue could affect the reputation of the group as a whole (issues relating to this type of group-related image concern are considered in Chapter 6).

Nonetheless, the range of evidence reported above suggests that recipient-donor similarity, task ego-centrality and recipient self-esteem are all important (and inter-related) variables within the Threat to Self-Esteem model, and that all have important roles to play in affecting the likelihood of help being requested or accepted. However, it is likely that incorporating an appreciation of the relevance of group memberships into the model would have provided researchers with a richer and more nuanced understanding of the complexities surrounding acts of help-seeking.

Relationship with helper. Another important factor in the Threat to Self-Esteem model (and one that shares many similarities with the concept of recipient-donor similarity) is the nature of the relationship that exists between the two parties in the helping transaction. For instance, an interesting case of recipient-donor similarity occurs when the helper is a friend of the receiver. Supporting the previously-discussed work on ego-relevance, Nadler, Fisher and Ben Itzhak (1983) found that receiving help from a friend on an ego-central task constituted a negative experience (indicated by negative affect and self-evaluations), but that the experience was perceived as highly supportive if the task was non-ego-central.

Meanwhile, Nadler, Fisher and Streufert (1974) found that aid perceived to have been sent by a friend was valued more highly than aid sent by an enemy, and was associated with more positive donor-related motivations (rather than ulterior motives). Furthermore, only 30% of participants accepted aid from an enemy, compared to 100% from a friend. Additionally, Shapiro (1980) found that participants were more likely to seek help from a friend than a stranger, but only when the stranger endured large costs in order to provide the help. If low costs were incurred, then no differences in help-seeking were reported. Shapiro suggested this was because people who help friends tend to face relatively small costs if they offer help (compared to people who help strangers), which in turn makes it more likely that help will be sought from friends.

Such results may also relate to the qualitatively different types of relationships experienced by friends who help each other, compared with strangers who help each other. Whereas friends and relatives tend to have *communal relationships*, where the receiver does not feel indebted or required to reciprocate the help immediately, strangers usually have *exchange relationships*, where the receiver feels indebted, and

usually repays the help after a short delay (Clark, 1983b). Communal relationships tend to be far richer than exchange relationships: they vary in strength, and are often based on years of shared experiences and understandings (Clark, 1983a). As well as revealing important findings regarding the nature of help-seeking, these results have important implications for help-seeking research: since the vast majority of experiments in the field involve strangers helping strangers, the complexities of communal helping transactions remain relatively unexplored (Schroeder et al., 1995).

Although the communal/exchange dichotomy is usually used to refer to dyads within the helping transaction, it is important to remember that shared *group-related* experiences and understandings have the potential to make seeking help from fellow ingroup members a qualitatively different experience to seeking help from outgroup members: something largely neglected by this avenue of research. Again, such issues are discussed in Chapter 6.

Helper attractiveness. Another interpersonal trait to have received attention from social psychology is the physical attractiveness of the helper, which may also affect the extent to which help-seeking is perceived as threatening. Relating again to Festinger's Social Comparison Theory (1954), some authors have suggested that individuals are more anxious to create a good impression when confronted with 'attractive' (as opposed to 'unattractive') individuals, and are therefore reluctant to seek help in such cases (since doing so would highlight their own incompetence). This idea was supported by Nadler (1980) and Nadler, Shapira and Ben Itzhak (1982), but the authors found that the sex of the helper (and of the recipient) moderated this effect. For instance, when the recipient was male and the helper was an 'attractive' female, help-seeking was inhibited particularly strongly, since males are usually highly motivated to present themselves as competent to attractive women. Female

participants also wished to present themselves to attractive men in a positive light, but this meant they were likely to *accept* the men's help, since this behaviour is consonant with the female gender-role of dependency (see later discussion). There is therefore strong evidence to suggest that an attractive helper makes self-presentation concerns salient to a potential recipient, but how this affects helping behaviour depends on the sexes of both parties.

Recipient's sex. Nadler et al.'s (1982) study highlights the importance of gender identities and gender stereotypes in the context of help-seeking behaviour, and how they may help to explain the different patterns of help-seeking observed in men and women. This area has received much attention from social psychology: it is well-documented that women tend to seek more help than men, especially for health-related problems, and even after contraception and reproduction have been accounted for (McMullen & Gross, 1983). It has previously been suggested that women may simply experience more physical and mental symptoms than men (and it does appear to be the case that women are more likely to notice symptoms than men are, and to translate these symptoms into the belief that they are ill, e.g., Kessler, Brown, & Broman, 1981). However, it is now widely agreed that these differences in levels of help-seeking are more likely to relate to the cultural stereotypes and gender-roles that individuals internalise from a young age. Women are regularly stereotyped as *communal* (or oriented towards connections with others), whereas men are regularly stereotyped as *agentic* (or oriented towards personal independence), (Moskowitz, Suh, & Desaulniers, 1994; Prentice & Carranza, 2002). Women and men are expected to behave in ways that are consistent with these stereotypes, and are liable to face punishment or derogation if they fail to adhere to these ideals. This observation also speaks to the idea of gender as a *social identity* with 'contents' (such as norms, values

and ideals) that group members are expected to adhere to (Turner et al., 1987).

Although most of the work outlined in this section does not conceptualise gender in this manner, it is key for this thesis, and will be investigated in more depth in later chapters.

Nonetheless, the idea that women and men behave in stereotype-consistent ways within helping transactions has been supported by numerous researchers. For instance, Benenson and Koulkazarian (2008) found that sex differences in help-seeking latency are observable from three years of age (which they suggest may relate to girls being more eager to engage in collective/communal problem-solving and less eager to engage in independent problem solving). Meanwhile, Prentice and Carranza (2002) found that even in academic settings, individuals perceive it as less desirable for women to possess traits such as competence and assertiveness (compared to men). Furthermore, there is evidence of a so-called *backlash effect*, where overly-agentic women and overly-communal men may face sabotage and low social desirability ratings because of their counter-stereotypical behaviour (Rudman, 1998; Rudman & Glick, 2001). Indeed, fear of backlash can encourage individuals to hide their counter-stereotypical behaviour, and increase their conformity to gender stereotypes (Rudman & Fairchild, 2004).

There is therefore strong motivation for both men and women to behave in ways that are consistent with prevailing gender stereotypes, and one aspect of this is to ensure that one's help-seeking behaviour meets the cultural ideal for one's sex. In Western culture, the process of help-seeking is inherently bound up with femininity, since it is associated with traits such as dependency, inadequacy and weakness (Lewis & Lewis, 1977). Unfortunately, this has potentially negative effects for both sexes. For instance, women who internalise the feminine stereotype of communion (leading

to high levels of help-seeking) will tend to experience low self-esteem and are likely to underestimate their own abilities. Furthermore, although women are more likely to actively seek help than men are (especially from their healthcare advisors), this behaviour is often not perceived in terms of agency and control, but in terms of hypochondria and being over-anxious about trivial issues (Seymour-Smith, Wetherell, & Phoenix, 2002). Women are therefore expected to seek help regularly, and, when they do, it merely stands to highlight their inferiority and weakness.

On the other hand, men who internalise the masculine stereotype of agency are more likely to refrain from seeking help at all costs, to avoid being perceived as ‘unmanly’ and ‘effeminate’. Qualitative researchers have discussed the idea of the *masculine hegemony*: the currently popular ‘version’ of masculinity (McVittie & Willock, 2006). At present, the masculine hegemony is usually considered to be one of power, control and self-reliance, which is generally at odds with conceptualisations of help-seeking behaviour (Seymour-Smith et al., 2002). This image of masculinity is widely accepted, with Seymour-Smith et al. finding that even healthcare experts (both male and female) usually expect men to refrain from seeking their help, and to be “brought kicking and screaming by partners”, who often attend the appointment with them (p. 257). Although the healthcare professionals found this notion rather comical and even admirable (since it indicates that, unlike women, men are ‘serious’ healthcare users, who only seek advice for really concerning issues), there can be strong negative implications for the men involved. For instance, these pervasive assumptions about masculinity and help-seeking can lead to men who do seek help being perceived as deviants, or as ‘un-masculine’, which may prevent these men from seeking help at all (Seymour-Smith et al., 2002). Indeed, studies examining this issue have raised important concerns about how adhering to masculine stereotypes could

have a negative impact on both the quality and length of men's lives (Addis & Mahalik, 2003; Emslie, Ridge, Ziebland, & Hunt, 2006; McMullen & Gross, 1983; O'Brien, Hunt, & Hart, 2005).

It therefore appears that even in these relatively liberal times, the norms and stereotypes contained within gender identities are adhered to strongly, and possible accusations of counter-normative (or counter-stereotypical) behaviour can lead to feelings of threat. Since influential help-seeking-related stereotypes remain connected to both male and female identities, it seems unsurprising that women often seek more help than men, and that men and women may attach different meanings to the act of seeking help.

Anonymity. A final situational factor that may also affect levels of perceived help-seeking threat is the anonymity of the interaction. For instance, anonymous transactions with little scope for future meetings between the helper and the recipient are usually perceived as low-threat situations, since any judgements that the helper makes about the help-receiver are unlikely to affect the help-receiver in the future. Incidentally, this is also the case for scenarios in which the helper is deemed to have a role-related responsibility to help, such as police officers at an accident, (Fisher, Nadler, & Whitcher-Alagna, 1982; Nadler, 1980; Nadler & Porat, 1978).

Threat to self-esteem model: Conclusions. There is strong evidence to support the Threat to Self-Esteem model of help-seeking, since it appears that a number of helper-related variables (e.g., relationship to the recipient and attractiveness), recipient-related variables (e.g., sex, similarity to the helper and level of self-esteem) and situational variables (e.g., anonymity and ego-centrality of the task) can interact to affect the threat associated with receiving help. Theorists argue that individuals in need will essentially perform a cost-benefit analysis, where they take these multiple

(context-dependent) factors into account, and decide if the advantages of seeking help outweigh the disadvantages. This therefore suggests that potential help-recipients will decide to seek help in some situations, but not in others, and that this decision will depend on the nature of the currently-salient variables. This makes the decision to seek help inherently complex and dynamic.

Moreover, the model (implicitly) suggests that decisions to seek help are often strategic: rather than simply assessing their absolute levels of need, potential help-seekers make help-seeking decisions based on more complex factors, such as their desire to maintain a sense of self-esteem, or an image that is consistent with prevailing gender norms. These conclusions are consonant with the anthropological and sociological research outlined in Chapter 1, and thus help to extend such conclusions into the domain of social psychology. Issues surrounding strategic help-seeking will be addressed in more depth in the next chapter.

However, as has been suggested throughout this discussion, the Threat to Self-Esteem model is limited by its failure to appreciate the relevance of social groups to the helping transaction. Acknowledging the importance of group memberships would help provide social psychology with a richer account of the processes surrounding both helping and help-seeking: an issue addressed in Chapter 6.

Attribution Model

The Threat to Self-Esteem model is but one of a number of ideas and theories that have been proposed in the help-seeking literature. Nonetheless, many of the alternative models also consider how various factors affect recipients' feelings of self-esteem and self-worth (and, like the Threat to Self Esteem model, they suffer from the limitation of failing to consider the relevance of group memberships). For instance, the attribution theory of help-seeking (e.g., Tessler & Schwartz, 1972) involves

considering how help-seekers make sense of what is often a highly complex and ambiguous situation, by investigating why recipients believe they needed help, and why they believe the help was given to them. This is an important model of help-seeking, because it conceptualises the help-receiver as a sophisticated and active agent who aims to solve a problem; a conceptual ‘equal’ to the helper, which is something that is relatively rare in the literature (Ames, 1983). In this way, the theory relates to the concept of adaptive help-seeking, which suggests that when it is utilised carefully and correctly, help-seeking can play a key role in learning, skill acquisition and development (Newman, 2000; Puustinen, Lyyra, Metsapelto, & Pulkkinen, 2008). Indeed, as children age and increase in cognitive sophistication, their amount of adaptive help-seeking (i.e., requesting hints rather than full answers, and only requesting help when it is genuinely required) increases (Nelson-Le Gall, 1987; Nelson-Le Gall, DeCooke, & Jones, 1989).

In the simplest version of attribution theory, the recipient tries to make attributions for the helper’s behaviour, which tend to relate to the *theory of correspondent inferences* (the belief that actions involving costs for the helper are likely to reflect the helper’s personality, rather than situational demands made on the helper). For instance, helpers whose actions are attributed to genuine concern for the recipient’s welfare are seen as less of a threat than those who appear to have helped due to selfish or ulterior motives (Fisher et al., 1982). Help-recipients also attempt to make attributions for their own neediness. If the attribution is external (i.e., the neediness was caused by something over which the recipient had no control), then threat remains low. However, if the recipient makes an internal attribution (particularly a stable and central one, that indicates a long-lasting personal deficit in an ego-relevant domain), then negative self-perceptions are likely to escalate. It

therefore makes sense for recipients to protect themselves by attributing their neediness to their environment whenever possible, although attributions will alter depending on the specific circumstances (Fisher et al., 1982).

Ames (1983) argued that the key aim of a needy individual making an attribution for their plight or failure is to attempt to protect and maintain a self-concept of competency. He argued this can be achieved in one of two ways: first, by making *help-relevant attributions*, where the individual considers him/herself to be competent, but attributes his/her need to internal factors such as lack of effort, and thus perceives help-seeking as a suitable response to their plight. Second, the individual may make *help-irrelevant attributions*, where the need is attributed to external factors which prevented the individual doing well, such as the task being very difficult, thereby making help-seeking an unsuitable response. To highlight the differences between these attributions, Ames discussed a study where students were recruited after sitting an exam, and asked if they would like to attend a revision session before sitting a second exam. Students who made help-relevant attributions regarding their performance in exam one (e.g., that they did not put enough effort into revising) were significantly more likely to attend a revision session before exam two, compared to those who had made help-irrelevant attributions (e.g., that the exam was unfairly difficult). Interpreting these results, Ames suggested the existence of a link between the use of help-irrelevant attributions and *ego-involvement* (when individuals are concerned about their self-esteem and the threatening elements of help), and a link between the use of help-relevant attributions and *task motivation* (when individuals are concerned about protecting their sense of competency, but their key aim is to accomplish a goal, and they will seek help to achieve this if necessary). It therefore appears that both an individual's willingness to seek help and how they conceptualise

the helping transaction are related to the type of attributions they make, and what they perceive to be the cause of their needful state.

In further support of attribution theory, Tessler and Schwartz (1972) found that participants were more likely to seek help if they were told that their failure was due to factors that did not cast doubt on their own competence (such as the unreliability of the rating scale used during the task), rather than being told they performed poorly due to lack of ability. This effect was especially strong for participants with high self-esteem who deemed the task to be ego-central: no participants sought help when the attribution was competence-related. However, when the attribution was non-competence-related, and self-esteem and ego-centrality were low, every participant sought help. The attributions individuals make (and the implications these have for their sense of competency) can therefore have important effects on their propensity to seek help. This suggests that help-seeking behaviour may be governed more by how the person in need *appraises* the situation, rather than the nature of the situation per se: a nuanced observation that has much in common with the anthropological and sociological research discussed in Chapter 1.

Equity and Indebtedness Theories

Consistent with the work on helping-related norms discussed in Chapter 2, other theories of help-seeking involve a more social process-perspective by focusing on the social norms and contexts inherent in the helping transaction. Equity theories (e.g., Greenberg, 1980) and indebtedness theories (Greenberg & Westcott, 1983) suggest that the norm of reciprocity and feelings of indebtedness are key motivators for help-seekers. Proponents argue that individuals aim to establish equitable relationships with others, and when they experience inequity (i.e., when they receive assistance), they tend to feel anxiety and discomfort. This negative state is alleviated

by either repaying the debt, or, if this is not possible, by creating psychological equity through cognitive distortion of reality (i.e., the individual might decide that the help did not involve a large cost to the helper after all, so they are less indebted to the helper than they first thought), (Fisher et al., 1982). Factors that will affect the magnitude of the indebtedness feelings include the extent of the help provided, the costs involved to the helper and the perceived motivations for the help (i.e., feelings of indebtedness will be higher if the help was seen to be based on feelings of altruism), (Greenberg & Westcott, 1983).

Numerous studies support these principles. The finding that participants dislike asking a busy person for help (DePaulo & Fischer, 1980) could be interpreted as a case where the perceived costs to the helper (and thus the subsequent indebtedness for the recipient) are simply too great. Furthermore, the finding that participants who are highly sensitive to helpers' nonverbal body language cues that signal hidden feelings (emotional 'leakage') are more reluctant to seek help suggests these individuals may be particularly aware of the costs experienced by the helper during helping transactions, and may avoid seeking help in order to prevent helpers feeling covertly disgruntled (DePaulo & Fisher, 1981).

Scenarios in which the help-recipient is unable to reciprocate the assistance will also be perceived in rather negative terms. Indeed, Amato and Saunders (1985) found that the ability to reciprocate is one of the four key cognitive dimensions that affect recipients' reactions to help, along with the level of threat to self-esteem, the nature of helper-recipient relationship and the perceived expertise of the helper. Meanwhile, Hatfield and Sprecher (1983) suggested that the ability to reciprocate (either immediately or in the future) is key to cultivating happy and positive relationships between both friends and strangers. Relationships without reciprocity

can lead to feelings of distress and exploitation: negative feelings which can be directed at the help-recipient (who cannot reciprocate), or at the helper (who provides aid that cannot be repaid). Combining their work with the research discussed in Chapter 1, Hatfield and Sprecher reported numerous anthropological examples of groups striving to create reciprocal relationships, such as Pacific tribes' *kula-ring* relationships, where tribal elders take turns to give and receive gifts. Both anthropology and social psychology have therefore concluded that reciprocation may be a vital element in the helping transaction, and an absence of reciprocity can have severely detrimental effects on both parties.

However, as was the case with the norm-related helping research discussed in Chapter 2, it should be remembered that different social groups may encourage their respective members to adhere to different norms: a facet of social norms that is not considered by the research reviewed in this section (but is considered in later chapters).

Reactance Theory

Finally (and again focussing on the *costs* of seeking help), Reactance Theory (e.g., Brehm, 1966), suggests that any behaviour perceived to limit levels of personal freedom can lead to negative feelings, or reactance, which motivates the individual to try to restore their feelings of freedom and autonomy (Silvia, 2006). Although the theory has often been tested in the context of participants feeling pressured into providing help (e.g., Adelman & Berkowitz, 1983; Berkowitz, 1973; Goodstadt, 1971), the concept has also been applied to help-seeking and help-receiving. Aid is most likely to elicit reactance (and thus increase the chances of help refusal) when it is perceived to be situationally inappropriate, is given with 'strings attached', threatens important personal freedoms (Fisher et al., 1982), or cannot be reciprocated

(El-Alayli & Messe, 2004). In cases where the help cannot be refused (i.e., it is forced onto the recipient), the recipient may attempt to regain personal freedom by derogating the helper, or by downplaying the assistance provided (Fisher, 1983). These responses therefore show strong parallels with the anthropological and sociological examples of help-receiving discussed in Chapter 1, suggesting that some of these help-receivers may have been experiencing reactance.

Through investigating such issues, reactance theorists have highlighted the strongly negative feelings sometimes associated with help-seeking and help-receiving. Although the theory is only useful in cases where the help has limited the recipients' freedoms in some way (Fisher et al., 1982), it emphasises the intense frustration experienced by many help-receivers. In summary, although reactance theory retains a strongly interpersonal (rather than intergroup) focus, it, along with the other theories discussed in this chapter, might go some way to explain why those in need are often so reluctant and unwilling to seek or accept help, even when they desperately need it.

Concluding Comments

The social psychological research described in this chapter provided (and continue to provide) many ideas and theories regarding the processes involved in seeking help. Although a (non-exhaustive) number of separate models have been reviewed in this chapter, many of the newer models grew organically from the older ones, and thus show significant amounts of overlap. Furthermore, central concepts such as self-esteem, gender roles, similarity to the helper and anonymity of the interaction are featured in many of these models. It is therefore probably helpful to consider these models in combination, and to think about the overarching themes of the help-seeking process, rather than to focus exclusively on any one model.

These theories and models have helped social psychologists shed light on one of the key questions raised in Chapter 1: why people in need are often so unwilling to seek help. Merely asking this question represented a significant step forward for help-seeking research: by moving beyond the assumption that individuals are always happy and grateful to receive help, researchers have begun to investigate the surprisingly complex processes involved in this under-studied aspect of the helping transaction. Moreover, they have started to consider how it might actually *feel* to be helped. Researchers have a responsibility to investigate the reasons behind individuals' reluctance to seek help, and to consider how this reluctance might be reduced. Adopting this perspective therefore allows helping transaction research to have practical benefits, as well as advancing theoretical understanding.

It is clear that much of the inspiration for these theories and models was born out of the anthropological and sociological research discussed in Chapter 1, since most of the work discussed in the present chapter involves appreciation of the idea that help-seeking can be strategic (i.e., related more to achieving underlying goals and reducing underlying concerns than to absolute levels of need). By adopting this assumption from the anthropology and sociology literatures, social psychologists have devised relatively rich and nuanced models of the help-seeking process, which contribute to and reinforce the research outlined in Chapter 1.

Nonetheless, it is important to note that just as the majority of the 'traditional' helping research discussed in Chapter 2 failed to appreciate the significance of group relations, so too does the 'traditional' help-seeking research. Just like helpers, help-seekers belong to social groups, and their understandings of these group memberships may have significant effects on when (and from whom) they are likely to seek help (e.g., Nadler, 2002). Neglecting this issue has limited social psychology's

contribution to understandings of help-seeking, but future chapters consider how this important issue has been addressed by more recent research.

However, before moving on to explore this idea, there remains one important aspect of the more ‘traditional’ social psychological helping transaction literature that has not yet been explored in depth this thesis (although it has been hinted at in the present chapter, and was considered in the anthropological and sociological review outlined in Chapter 1). This concerns the idea that acts of helping and help-seeking can have underlying motives, and can be deployed in an attempt to obtain specific goals. In this way, helping and help-seeking can be thought of as tools to enable individuals to obtain benefits, rewards and approval. The idea of underlying motives within the helping transaction is a key element of this thesis, so the following chapter provides a review of the social psychological evidence in support of this important claim.

Chapter 4: Social Psychological Perspectives on the Motives Behind Helping and Help-Seeking

“There are those who give little of the much which they have - and they give it for recognition and their hidden desire makes their gifts unwholesome.”

- “Giving”; Kahlil Gibran (1926)

One key idea to emerge from the anthropological and sociological literature discussed in Chapter 1 is that people’s motives for engaging in helping transactions are not always as ‘pure’ and uncomplicated as they may appear. People may approach the helping transaction with desires to achieve underlying goals that have little to do with meeting another’s needs, and instead relate to personal improvement or gain. Although this issue has not been addressed to the same extent in social psychological research, there is a body of work that has been carried out with the aim of exploring the concept of underlying aims within the helping transaction. The present chapter reviews and appraises this research, whilst comparing it with the anthropological and sociological strategy-based research discussed in Chapter 1.

Social psychologists have generally considered two different types of underlying aims that people may attempt to achieve by engaging in helping transactions, and the present chapter involves consideration of both. The first involves using helping transactions to enhance how one feels (e.g., to improve mood or to reduce anxiety), or to enrich one’s relationships with others. The second is strongly related to the idea of ‘strategy’ introduced in Chapter 1. The concept of strategy encapsulates the way in which anthropologists often think about individuals pursuing underlying aims within the helping transaction. When investigating this issue,

anthropologists tend to place their work within the context of social interaction, and focus on the idea that people use helping transactions to influence how they are perceived by others. Unlike some of the more general motives discussed in this chapter, strategic behaviour is thus motivated by awareness of how one is seen by others (or *meta-awareness*). For instance, evidence was provided in Chapter 1 to suggest that individuals and countries may provide help with the aim of enhancing their own status and emphasising their social dominance. Meanwhile, other accounts indicated that individuals and countries may refuse to accept help in order to maintain a sense of dignity and honour, either within their own community or on the world stage. For ease, these ‘higher-level’ types of motive will continue to be referred to as *strategic* motives in this thesis, in order to differentiate them from ‘lower-level’ (i.e., non-meta-awareness-related) motives. In this research, the term ‘strategy’ therefore has a specific meaning (which is central to this thesis).

As well as highlighting the motives that may be present during helping transactions, this chapter also aims to illustrate the ways in which social psychology has adopted and investigated issues from within the spheres of anthropology and sociology. Although social psychology has close connections with these disciplines (Hogg & Vaughan, 2008), it tends to involve a somewhat different focus and methodology. For instance, the utilization of the scientific method and the adoption of experimental designs have tended to give social psychologists relatively high levels of control over interesting phenomena: something that is rarely (if ever) the case in anthropological and sociological research. This means that while much of the social psychological research presented in this chapter compliments the anthropological and sociological work discussed in Chapter 1, it also provides a unique perspective on the issue of strategy within the context of the helping transaction. Nonetheless, since

social psychologists have also devoted large amounts of time to exploring ‘lower-level’ (i.e., non-meta-perception-related) motives (something that also differentiates them from anthropologists and sociologists), this chapter begins by discussing these more general motives, before moving on to discuss social psychology’s analysis of genuine strategic behaviour within the helping transaction.

‘Lower-level’ Motives: The Self as an Individual

As discussed above, a number of social psychological theories of the helping transaction have focussed on the idea that the provision and receipt of help can be motivated by underlying desires to improve one’s personal situation in some way. These theories do not consider how such behaviours could be used to enhance one’s reputation in the eyes of others: the focus is on how people use helping transactions to feel better about themselves and their relationships. Such accounts of the helping transaction also suffer from a key limitation outlined in previous chapters: they neglect the role that social groups may play in such situations, and how being a member of a social group might affect individuals’ motivations for giving or receiving help. Chapters 5 and 6 discuss this issue.

Help-Giving Motives

Cost/reward models: Helping others to benefit the self. Some theorists recognise that, contrary to the work on empathic concern (see Chapter 2, e.g., Batson, Chang, Orr, & Rowland, 2002), it is common for individuals to think about *themselves* when deciding whether or not to provide help. One of the most influential models in this area is Piliavin’s Cost-Reward Model (Piliavin, Dovidio, Gaertner, & Clark, 1981), which suggests that potential helpers aim to behave in a way that yields maximum personal benefit, whilst simultaneously minimizing any potential costs of providing help. To do this, potential helpers are believed to perform a cost-benefit

analysis before deciding whether or not to help. Factors that increase the risks faced by the potential helper are therefore likely to reduce helping, whereas factors that increase the potential rewards and benefits are likely to increase helping. The potential costs and benefits of *not* helping are considered in a similar manner. It is likely that the relative weightings of these costs and benefits alter depending on the specific situation (e.g., the helper's mood, the nature of the helper-recipient relationship and the severity of the incident), (Dovidio, 1984). It therefore appears that the decision to help is not made lightly: instead, it is the result of complex and sophisticated calculations, which aim to maximise the benefits for the helper as an individual. This model therefore suggests that even when people help others, their thoughts and concerns are sometimes firmly self-centred.

Affect models: Helping feels good. Others have considered more specific benefits that helping brings to the helper. For instance, the Negative-State Relief model (e.g., Cialdini, Schaller, Houlihan, Arps, & Fultz, 1987) and the Arousal: Cost-Reward model (e.g., Piliavin et al., 1981) both conceptualise helping as a way to reduce the negative affect and unpleasant emotional arousal one experiences when witnessing another's suffering, thereby allowing oneself to feel better. As with the Cost/Reward Model, these models challenge the theorists described in Chapter 2 (e.g., Batson & Weeks, 1996), who advocated the existence of selfless altruism as a motivator of helping behaviour. Instead, affect theorists argue that helping emerges from selfish motives to make oneself feel less distressed in a world of pain and suffering. For instance, Cialdini et al. (1987) found that helping was predicted by levels of participant sadness caused by another's suffering, rather than by empathic concern for the individual. Others have found that higher levels of emotional arousal are linked to higher levels of helping, as well as to individuals deciding to help more

quickly (e.g., Gaertner, Dovidio, Sterling, & Johnson, 1977). Helping also appears to be an effective way to reduce guilt: an emotion commonly experienced when suffering is witnessed (de Hooge, Nelissen, Breugelmaus, & Zeelenberg, 2011; Dovidio, 1984).

Proponents of such models suggest that helping only occurs in cases where the behaviour is predicted to reduce one's negative feelings: an assumption supported by the results of various studies. For instance, Manucia, Bauman and Cialdini (1984) found that participants experiencing negative affect would only help someone in need if they were told their negative mood was alterable: if they were informed that their negative mood was 'fixed' by a drug for a specific period (so helping others had no chance of improving their affect), then helping was unlikely to occur. The behaviour observed in such studies can therefore be defined as egoistic: participants help themselves feel better by helping others, regardless of the effect that the help has on the person in need (Dovidio, 1984).

Self-other overlap: Helping others actually helps the self. Closely related to affect-based theories is the idea that helping might be a way to share in another's joy. This is particularly likely to occur when the helper experiences a high degree of empathy for the recipient, and can imagine how it would feel for the recipient to have their problem reduced by receiving help. The finding that individuals are more likely to help someone if they are presented with evidence that their helping benefited the recipient (Smith, Keating & Stotland, 1989), also suggests helpers like to witness (and perhaps share in) the joy and positivity their help can bring.

Developing this approach, Cialdini, Brown, Lewis, Luce and Neuberg (1997) suggested that when a helper gives to others, particularly to those with whom they share a close bond (Maner & Gailliot, 2007), the helper might experience a strong

sense of *oneness* (or self-other overlap) with the recipient, and actually perceive the help to be helping him/herself, rather than the recipient. Cialdini and his colleagues found oneness to be a powerful mediator of helping intentions, especially in scenarios involving close-knit relationships. Like the affect and cost/benefit-related models, the theory of oneness has been used to challenge the idea that helping can be motivated solely by empathy. This is because the theory suggests that it is impossible to know if an individual is helping someone out of genuine concern for the person's welfare, or whether by helping the other person, they are simply helping themselves. Attempting to untangle these processes, Maner et al. (2002) concluded that the primary mediator of helping behaviour is oneness, and that perspective-taking (i.e., empathy) only affects helping when cues indicating levels of oneness are removed. These results highlight the significant effects that feelings of oneness can have on helpers, and how such feelings can motivate them to help others. However, it may be the case that feeling that one belongs to the same *group* as the person in need also has the potential to produce oneness-like feelings (a possibility that is largely ignored by researchers in this domain). This idea is discussed in Chapter 5.

Terror management theory: Helping reduces anxiety. As well as enabling people to enhance their mood and share in the recipient's joy, helping can also be used to improve how people think about themselves and their place in the world. Terror Management Theory (TMT) (e.g., Harmon Jones, Greenberg, Solomon, & Simon, 1996; Rosenblatt, Greenberg, Solomons, Pyszczynski, & Lyon, 1989) provides evidence of individuals using helping to achieve such goals. TMT researchers suggest that being reminded of one's inevitable death (a state known as *mortality salience*) leads to great discomfort, unhappiness and fear, and that individuals will use a number of methods to reduce these negative feelings. One way

of doing this is to adhere to and defend one's *worldview*, which encapsulates one's behaviours, attitudes, culturally-bound norms and experiences, and gives meaning to one's life. By living up to our worldview, or by altering our behaviours so they are consistent with our worldview, we can, in effect, cheat death, since our values and norms transcend us, and exist after we have passed away (e.g., See & Petty, 2006; Tam, Chiu, & Lau, 2007).

One way of defending and enhancing one's worldview (as well as living up to the principles embodied in it) is to give to others, particularly those who share that worldview (Castano & Dechesne, 2005). Such behaviour enables individuals to contribute to society in a meaningful (and culturally-approved) manner; a behaviour that lives on after death. This has been named *the Scrooge Effect* (Joireman & Duell, 2005; Jonas, Schimel, Greenberg, & Pyszczynski, 2002), since the behaviour is reminiscent of Scrooge's generosity after witnessing his future demise in Dickens' *A Christmas Carol*. Indeed, the behaviour is most prevalent amongst self-centred (or 'pro-self') individuals, just as Scrooge was (Joireman & Duell, 2005, 2007). When these people experience mortality salience, they realise their pro-self behaviour is inconsistent with their cultural worldview, and they therefore behave generously in order to reduce the anxiety generated by this realisation. This behaviour is therefore strongly motivated by self-centred aims. Indeed, the authors found that if pro-self individuals are presented with a mortality salience prime, but are then reassured about the cultural acceptability of their selfish behaviour, they are unlikely to behave any more prosocially than participants who do not experience the prime. The generous behaviour exhibited by these participants was therefore merely a way of reducing their own anxieties. TMT studies therefore suggest that acts of helping may sometimes be motivated by a desire to reduce one's personal anxieties.

Help-seeking Motives

Seeking help to enhance relationships. There is also evidence to suggest that people may use *help-seeking* to enable them to feel better about themselves and their relationships with others. For instance, Clark (1983b) noted that individuals may sometimes seek help when they do not actually require it. This may be done to initiate positive social interaction, to flatter the helper by suggesting they can do something the recipient cannot, to gain his or her attention (perhaps with romantic intent), or to please the helper by reinforcing their abilities and knowledge. In this way, help-seeking can be used to strengthen and enhance pre-existing relationships, or even forge new ones. In support of these ideas, Rosen, Mickler and Collins (1987) found that helpers whose offer of assistance is spurned tend to evaluate the help-refuser negatively, which highlights the important link between successful helping transactions and positive social relationships. Additionally, Grant and Gino (2010) found that helpers were more likely to help again if their initial act of prosociality was met with comments of gratitude, which the authors found was due to the fact that such comments enhance helpers' feelings of social worth. This suggests that helping people who express gratitude for that assistance enables helpers to feel valued in social interactions, and it is likely that help-receivers use this knowledge to their advantage.

Seeking help to test relationships. Help-seeking can also be a way to test the status of a pre-existing relationship. As discussed in Chapter 3, Clark (1983a) distinguished between communal and exchange relationships, and how they lead to people experiencing different attitudes towards the helping transaction. A core element of communal relationships is that the helper does not tend to perceive the help as costly, and does not automatically expect the help to be reciprocated (the opposite tends to be true in exchange relationships). By seeking help and observing

the helper's reactions and behaviours, individuals can therefore discover the type and status of that particular relationship, and perhaps then use the techniques described above to attempt to enhance its quality. Although it is an everyday activity to which people usually give little thought, the act of help-seeking can therefore be conceptualised as a rather powerful relationship-management tool.

'Higher-level' (Strategic) Motives: The Self as Seen by Others

As well as investigating ways in which acts of giving and receiving help can be used to enable people to feel better about themselves and their interpersonal relationships, social psychologists have also considered how such behaviours can be used to attempt to achieve a more cognitively complex aim: to manage the impressions others hold about us. This 'strategic' behaviour is consistent with many of the anthropological and sociological accounts in Chapter 1, where people and groups used helping transactions to attempt to alter their social image. Strategic behaviour involves a 'meta' element: an awareness and appraisal of how one is perceived by others, and how these perceptions could be changed or managed. Although it has received relatively little attention in social psychology, there is some evidence to support the idea that helping transactions can allow people to manage the social image they project to others. Again, this work has generally neglected the role that social group memberships can play in motivating this type of strategic behaviour (for instance, group members may be more concerned about managing the image of their group, rather than their own personal image). This possibility is considered in Chapter 6.

Help-Giving Strategies

Competitive altruism: Helping others makes me look good. Incorporating similar themes to those outlined in much of the anthropological work reviewed in

Chapter 1, Hardy and van Vugt (2006) discussed the Competitive Altruism Hypothesis, which conceptualises helping as a *costly signal* (e.g., Bird & Smith, 2005). Costly signals are time- or resource-consuming ways of projecting a positive image of oneself to others (rather like a peacock's tail). From this point of view, helping is an activity that handicaps in the short-term (by reducing personal resources), but benefits in the long-term (by highlighting one's generosity, which attracts mates and allies, and enhances social status). Proponents of this theory therefore conceptualise helping as an impression management strategy, albeit one that is not cost-free. Indeed, the fact that helping is costly is important, as this indicates to others that the signal is genuine, and that the signaller is willing to engage in some form of sacrifice to highlight their desirable qualities (Hardy & van Vugt, 2006).

Hardy and van Vugt (2006) tested their theory of competitive altruism in the context of public goods games and resource dilemma games. They found that individuals who behaved most altruistically earned significantly less than other participants, but received the highest status ratings, were preferred as interaction partners and were most likely to be selected as the group's leader. The authors therefore argued that behaving in a helpful manner is an effective way of enhancing one's reputation (if one is willing to sacrifice resources to pursue such a goal). The fact people *are* willing to engage in this strategy suggests that a high value is placed on possessing a positive social image, and that it is easy to feel concerned when one's reputation is under threat.

Supporting the Competitive Altruism Hypothesis, Milinski, Semmann and Krambeck (2002) suggested that charitable giving may be motivated by a desire to signal one's social reliability, which can increase the likelihood of being selected to lead or represent social groups. Reinforcing this idea, Semmann, Krambeck and

Milinski (2004) found that participants tended to engage in more cooperative and prosocial public goods game-playing behaviour when they were aware their actions were being observed by others: a phenomenon the authors described aptly as ‘strategic investment in reputation’. Such evidence, coupled with the fact that helping is usually perceived as a ‘pure’ behaviour, which observers rarely attribute to strategic motives (Hopkins et al., 2007) supports the idea that providing help to others may be an often-used (and apparently rather successful) costly signal.

Personal impression enhancement: Helping others makes me look better.

Closely related to the concept of costly signalling is the idea (suggested in Chapter 1) that helping others can be a method of personal impression enhancement, especially in situations where one’s social image is under threat. In his review of the literature, Baumeister (1982) theorised that there are two separate (although often inter-related) forms of impression management and enhancement: the desire to please an audience and the desire to construct and conform to one’s ideal public self image (i.e., the image that one wishes to project in public). Baumeister argued that helping can achieve both aims.

In support of the former idea (that helping might be carried out to please an audience), Baumeister noted that individuals tend to be more generous in the presence of others, and suggested that it may be feelings of anonymity and invisibility that actually foster the bystander effect (Latané & Darley, 1970). Indeed, Gottlieb and Carver (1980) found that when participants expected to meet fellow bystanders in the future, the bystander effect diminished (presumably because they feared that not intervening would risk damaging their social image, which could be disadvantageous in the context of future interactions). These findings suggest that a large number of

everyday acts of helping may be strategic attempts to win favour with the audience witnessing the behaviour.

In support of the latter idea (that helping might be carried out to construct and conform to one's ideal public self image) Baumeister reviewed the work of Steele (1975), who found that participants were more likely to carry out a request over the telephone if they had received an (apparently unrelated) telephone call beforehand, during which the caller suggested that the participant possessed a poor social standing in their local community. This suggests that individuals may use helping to enable them to enhance their own self-image, even in cases where the person who received the help was not aware of the individual's (apparent) shortcomings. Overall, these results suggest that helping can be a powerful self-presentation tool in situations where one's social image is under threat.

Help-seeking Strategies

Refusal of help. Compared to the helping-related literature discussed above, there is little social psychological research that defines help-seeking explicitly as an impression management tool. Nonetheless, as suggested in Chapter 3, the 'traditional' social psychological help-seeking research did tend to involve at least some appreciation of the concept of strategy. Many of these theorists investigated why people in need often refuse help, and it could be argued that such refusals often involve the person in need appreciating how seeking help could affect the impressions that he/she projects to others. For instance, some of the work described as supporting the Threat to Self Esteem model (Fisher et al., 1978) suggested that people in need are aware that seeking help may make them appear incompetent to others, or could generally create a bad impression (e.g., Lee, 2002; Nadler, 1980). From this

perspective, it could be argued that there are numerous situations in which help-seeking-related decisions represent strategic attempts to manage one's social image.

However, refusing to seek or receive help for social-image-related reasons is not always an easy decision to make. In his review of the self-presentation literature, Baumeister (1982, p. 7) noted that being in a state of need produces feelings of conflict for an individual who wishes to present themselves positively in public: "To the extent that the self-construction is dominant, recipients of help normally desire to present themselves as not being weak, helpless and dependent; the immediate ulterior motive of obtaining help, however, is best served by presenting oneself as weak, helpless, and dependent." A state of need therefore places the individual in a difficult situation: do they refrain from accepting help and maintain an image of independence and strength (yet remain in need), or do they seek help and risk being perceived as incapable? The literature reviewed in Chapter 3 suggested that various factors may be involved in enabling the individual to reach this decision, so it is likely that people in need consider a number of issues before deciding whether or not to seek help.

In his review, Baumeister (1982) concluded that help-seeking becomes more likely if the individual feels they can seek help yet still maintain a positive public image. For instance, Tessler and Schwartz (1972) increased the incidence of help-seeking amongst participants by creating a situation where participants' need for help could be attributed to non-competency-related causes (that the task is difficult) rather than to competency-related causes (that the individual is poor at the task). Furthermore, Broll, Gross and Piliavin (1974) found that help is received in a more positive manner when it is offered rather than sought (presumably because the individual does not need to face the embarrassment of admitting they are experiencing

difficulties). Factors such as these can reduce the risk to one's public image caused by seeking and receiving help, and can therefore increase the incidence of such activities.

These observations suggest that help-seeking behaviour can be motivated by strategic concerns, since individuals do not only consider their absolute levels of need when making the decision to seek help, but also how help-seeking will affect their personal image and reputation. Potential recipients seem to weigh the positive and supportive elements of being helped against the negative and image-threatening elements in a strategic manner, and ultimately decide if the benefits outweigh the costs.

Acceptance of help. It appears that as well as the *refusal* of help sometimes being deployed to manage one's image, the *acceptance* of help can also have similar underlying motives. For instance, by adopting evidence from the domains of anthropology and sociology, Greenberg and Westcott (1983) noted that receiving certain types of help (especially on dull or unpleasant tasks such as having one's shoes shined or having one's ashtray emptied) can be a way to symbolically indicate one's superiority to the help giver, or to highlight one's wealth and social status. The ultimate example of this is the use of slaves and servants: a practice which projects a strong message about one's social status in many cultures, both in modern times and during various historical periods (Bryson, 2010). Employing slaves and servants implies that some tasks (e.g., cooking, cleaning or gardening) are socially 'beneath' the individual or are too trivial to fit into their busy schedule (rather than the individual being incapable of carrying out such tasks), and that these tasks must therefore be entrusted to someone of lower social standing. There therefore appear to be specific domains and contexts in which receiving help can highlight one's

independence and superiority, rather than dependence and inferiority, with the use of ‘hired help’ being a particularly conspicuous way to reinforce this fact to others.

Concluding Comments

The social psychological literature contains a range of evidence to support the idea that participation in the helping transaction can be motivated by the desire to achieve diverse underlying goals and aims. In this chapter, it has been argued that social psychologists tend to investigate two separate types of motives: ‘lower-level’ motives, which aim to make the person feel better about themselves and their relationships, and ‘higher-level’ motives (or strategies), which enable the person to enhance their reputation in the eyes of others. Both types of motive are intriguing, because (as mentioned in Chapter 1), they suggest that helping others is not always the product of entirely benevolent and tender-hearted motivations, and that decisions made regarding whether or not to accept help may not always be completely consonant with one’s level of need. These revelations have enabled social psychologists to appreciate the complex underlying processes that can drive helping transactions.

Although both types of motive are worthy of study, the ‘higher’ motives (i.e., those involving meta-awareness) are especially significant. This strategic behaviour involves an appreciation of how one is perceived by others, and awareness of how one can manage these perceptions through the helping transaction. This indicates that the individual in question possesses high levels of cognitive sophistication, and, importantly, an intense concern for their social image: something examined in Chapter 6. As previous chapters have shown, the helping transaction is irrevocably bound up with ideas such as capability, honour, independence and dependence, so it is

perhaps unsurprising that individuals would be aware of how their acts of helping and help-seeking could lead to them becoming perceived in terms of these traits.

However, the idea that people use this awareness to attempt to *manage* and *enhance* how they are perceived by others is an especially exciting prospect, and one that was of specific interest to the anthropologists and sociologists discussed in Chapter 1. Nonetheless, few social psychologists have considered these types of strategies in the context of the helping transaction, so the aim of this thesis is to make a unique contribution to the social psychological literature by considering how decisions within the helping transaction can be motivated by ‘higher-level’ strategic concerns. As mentioned at the outset of this chapter, social psychological theories and methods tend to be distinct from the domains of anthropology and sociology, meaning that adopting a social psychological perspective offers unique insight into strategic helping transaction-related behaviour. At the same time, considering the topic in this way helps to reveal commonalities between social psychology, anthropology and sociology in terms of themes and research interests shared by the disciplines (as previous chapters aimed to demonstrate).

On the basis of the literature reviewed and discussed in this chapter, it appears that an appreciation of the concept of strategy has produced important theoretical and empirical advances in the social psychological study of the helping transaction. However, as has been noted in a number of previous chapters, social psychological researchers have neglected a potentially important issue when attempting to conceptualise the helping transaction: the role of social groups. Nonetheless, more recent work has begun to explore this important issue: by acknowledging that we are all members of multiple social groups, and that these memberships have significant effects on our cognitions and behaviour, social psychologists have begun to change

how they think about the processes of helping and help-seeking (as well as how the concept of strategy relates to these topics). This new appreciation of the group-level perspective (and the growing dissatisfaction with the ‘traditional’ interpersonal perspective) has important implications for helping transaction research (and for social psychology as a whole). These implications are discussed in the next chapter.

Chapter 5: The Relevance of Social Identity to the Helping Transaction

The review presented over the previous three chapters described how the social psychological research carried out from the 1960s onwards shaped researchers' conceptualisations of the helping transaction, and enabled them to question some of the key assumptions often associated with this domain. Nonetheless, as suggested at various points throughout these chapters, the overall focus and rationale of this work has not been without its critics. Specifically, some theorists highlighted how this research has conceptualised the helping transaction as purely interpersonal in nature: both the help-giver and help-receiver are perceived as independent individuals who remain isolated from the larger context of the world around them. For example, examining the personal traits and characteristics that affect the likelihood of people giving or accepting help, or the situations in which helping is likely to occur are both useful endeavours, but they neglect the fact that as well as being individuals, the people in question will also consider themselves to be members of multiple social groups. This (seemingly obvious) conclusion leads to an important shift, with the emphasis of the research being re-focused from personal characteristics to collective group-related characteristics (Ellemers, Spears, & Doosje, 1999).

Social Identity Theory

The idea that membership of social groups influences cognitions and behaviour has been a core theme of both Social Identity Theory (SIT, e.g., Tajfel, 1978; 1982) and, later, Self Categorisation Theory (SCT, e.g., Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Before these theories were devised, groups tended to be perceived as the combined product of interpersonal interactions (Hornsey, 2008), and 'cohesive' groups were simply believed to exist when individuals within groups

experienced interpersonal attraction (Hogg & Hardie, 1991; Rutkowski, Gruder, & Romer, 1983). Challenging this, SIT theorists argued that intragroup interactions are qualitatively different from interpersonal interactions. A key reason for this is that, during intragroup interactions, individuals are able to represent the group and its contents cognitively, allowing them to categorise themselves as ingroup members regardless of levels of interpersonal attraction or the extent to which they engage with other ingroup members (Hogg & Turner, 1987). This self-categorisation leads to *depersonalisation*, where group members perceive themselves as interchangeable members (or exemplars) of the group, rather than unique individuals. This has important implications for cognition and behaviour (Turner et al., 1987). Moreover, the more the group member identifies with the group (i.e., perceives their membership of the group as central to their image), the stronger these effects will be.

For instance, highly-identifying group members are usually particularly motivated to achieve and promote a positive and distinct social image of their group (Oakes, Haslam, & Turner, 1994). Ideally, this positive identity should be experienced by both ingroup members (so they feel happy and proud to be part of the group) and members of other groups (so a positive image of the ingroup is presented to outgroups, enabling the ingroup to enhance its reputation and remain distinct from other groups). This motivation to present a positive group image can lead to ingroup members using image-enhancement methods (see Chapter 6), especially in situations where the ingroup's image has been tarnished (Mummendey, Kessler, Klink, & Mielke, 1999). This may involve strategies such as competing with other groups for status or materials (Tajfel & Turner, 1979), departing from the group and claiming membership of an alternative group with a more positive image (a popular strategy for those less identified with the ingroup and therefore less attached to it), (Cameron,

Duck, Terry, & Lalonde, 2005), or using creative skills to re-frame the group's strengths and weaknesses in a more positive light (Blanz, Mummendey, Mielke, & Klink, 1998; Williams & Giles, 1978). This analysis of intergroup behaviour goes beyond the realms of the 'traditional' interpersonal focus in social psychology, and has major implications for the field as a whole, as well as for issues surrounding helping transaction research.

Self Categorization Theory

The principles of SIT were eventually expanded and re-focused to form SCT (Turner et al., 1987). Still concentrating on the importance of intergroup relations, SCT theorists introduced the concept of *salience*: that people can categorise themselves at different levels of inclusiveness, and whichever categorisation is currently salient (or cognitively prominent) will have implications for the person's behaviour and attitudes. People can categorise themselves as individuals (and compare themselves with others on an interpersonal level), but they can also categorise themselves as members of specific groups, which vary in terms of inclusiveness. For instance, a person categorizing themselves as Protestant would consider Catholics to be outgroup. However, if the superordinate group 'Christians' became salient, Catholics would be re-categorized as ingroup. This shift would have important implications for how Protestants relate to and interact with members of the Catholic faith (Turner et al., 1987).

Ingroup Solidarity

This issue concerning who is perceived as ingroup is important, since we tend to feel a sense of connection with fellow ingroup members (Turner et al., 1987). These feelings of commonality can manifest themselves in various ways, from persuasive messages being perceived as more influential when voiced by an ingroup

member rather than an outgroup member (McGarty, Haslam, Hutchinson, & Turner, 1994), to participants finding comedy films funnier when the canned laughter on the soundtrack is believed to come from an ingroup rather than an outgroup audience (Platow et al., 2005). Rhetoricians and politicians have even used their understandings of ingroup solidarity to increase the persuasiveness of their speeches, by ensuring the audience categorizes both the speaker and themselves as members of the same group (Reicher & Hopkins, 1996a, 1996b).

Importantly for helping transaction research, Wenzel (2000; 2002) found participants generally consider ingroup members to be more deserving of resources than outgroup members, especially when those participants identified highly with the ingroup. Wenzel also noted that individuals perceived to excel in a skill that is deemed to be a prototypical ingroup ability (i.e., representative of the ingroup) are more likely to be seen as deserving of jobs and other resources, compared to those who demonstrate other (non-prototypical) skills (Wenzel, 2001). These findings therefore hint at a key idea: when it comes to issues such as providing help and social support to others, group identity *matters*.

Group Norms

SIT and SCT theorists suggest that one of the key reasons ingroup members are revered in this way is because they (usually) behave in ways that are consistent with ingroup norms and values, thereby producing a sense of commonality with fellow group members (Tajfel, 1978). This desire for commonality (and with it the sense of being a ‘good’ group member) makes ingroup members (particularly those who identify highly with the group) anxious to conform to ingroup norms, even when not being persuaded to do so explicitly (Jetten, Branscombe, Spears, & McKimmie, 2003). This means that (as mentioned in Chapter 2), the norms associated with the

ingroup can have behavioural effects that go beyond more general societal norms. Indeed, there is evidence that ingroup members will even adhere to ingroup norms that conflict with the norms generally associated with group membership in our society. Researchers have found that when the ingroup is described as advocating a norm of individualism (i.e., individuality), participants who identify highly with the ingroup comply with the norm (Jetten, McAuliffe, Hornsey, & Hogg, 2006; Jetten, Postmes, & McAuliffe, 2002), and approve of an ingroup member behaving in an individualistic manner (Hornsey, Jetten, McAuliffe, & Hogg, 2006). High ingroup identifiers are therefore motivated to conform to ingroup norms, even if those norms conflict with the ‘traditional’ view that group members should behave in collectivist and inter-dependent ways (Jetten et al., 2002).

Applying SIT and SCT to the Helping Transaction

Recently, this wealth of findings regarding the cognitive and behavioural importance of group memberships and group norms has begun to be applied to the sphere of helping research. Using the common principles of SIT and SCT, or the *social identity approach* (Hornsey, 2008), researchers have started to consider the helping transaction in a new light. This shift from an individualistic focus to a more group-based focus has provided new and important insights into the helping transaction.

Interpersonal Attraction vs. ‘We-ness’

For instance, a number of social identity researchers have reconsidered the key idea of interpersonal attraction, and how it relates to helping interactions. There is now a debate about whether similarity between the helper and the recipient (a mainstay of traditional helping research: see Chapter 2) is actually less related to interpersonal attraction (as once thought), and more related to a sense of *we-ness*: a

category shared by helper and recipient, which leads to the helper's and recipient's needs becoming coordinated (Hornstein, Masor, Sole, & Heilman, 1971). Sole, Marton and Hornstein (1975) supported this idea by utilizing the famous 'lost letter' paradigm to investigate we-ness. When the participant who found a 'lost' letter considered the person who lost it to be attitudinally similar to themselves (on the basis of the letter's contents) the participant was more likely to send the letter to its intended location. The authors observed a step-wise increase in helpfulness as similarity increased (rather than a steady rise, as predicted by 'traditional' theories of interpersonal attraction), which they argued indicated a shift in categorisation, from the recipient being classified as 'one of them' to 'one of us'.

Although Sole et al. did not investigate participants' understandings of these categorisations explicitly, other researchers have agreed about the importance of we-ness to the helping interaction, and have researched the issue in more depth. For instance, in Cialdini et al.'s (1997) discussion of their oneness theory (see Chapter 4), the authors noted that although the theory focuses on the perceived overlap between the helper and recipient as individuals, there is a striking similarity between participants' behaviour in their experiments and the behaviour of participants primed to experience feelings of ingroup solidarity. Indeed, Turner et al. (1983) noted that although it is often not possible to disentangle the mutual influences of interpersonal attraction and social categorisation on intergroup bias, their own research revealed that social categorisation alone is sufficient for ingroup solidarity to occur, and that interpersonal attraction is not necessary. Hogg and Hardie (1991) supported this conclusion with their analysis of an Australian football team, by showing that interpersonal attraction and friendliness between players were separate from feelings of group cohesion and social attraction. It therefore seems that Sole and colleagues

had good reason to highlight the shared-category element of we-ness: there appears to be a qualitative difference between interpersonal and intergroup liking, which has not been addressed by the traditional research. By starting to re-appraise the helping transaction in intergroup terms, researchers have thus begun to challenge much of the accepted 'knowledge' in the field: a process with major implications for how acts of helping and help-seeking are understood.

Challenging the Bystander Effect

One example of this re-conceptualisation (which was hinted at in Chapter 2) involves the social identity approach beginning to cast doubt on some of the major principles of the bystander effect (Latané & Darley, 1970), which involves the argument that the likelihood of emergency-intervention declines as the number of individuals present increases (due to diffusion of responsibility and pluralistic ignorance). Indeed, various authors illustrated the limitations and problems of the theory a number of decades ago (such as Horowitz's (1971) finding that members of groups that collectively endorse prosocial norms are actually *more* likely to intervene in emergencies when bystanders are present). This idea is also supported by the observation that prosocial ingroup norms have strong effects on group members' behaviour in general (such as the finding that nurses who identify highly with their profession are more likely to consider it a professional duty to get themselves vaccinated against influenza to protect their patients from infection, Falomir-Pichastor, Toscani, & Despointes, 2009). These results suggest that social identity and group norms may have important roles to play in phenomena such as the bystander effect.

However, it is only in recent years that an explicitly social identity-focused critique has been levelled at proponents of the bystander effect. For instance, Levine,

Cassidy, Brazier and Reicher (2002) argued that the theory neglects the importance of bystanders' social categorisations, the norms bound up with these social categories, and the role that category salience plays in affecting bystander behaviour. The authors asked participants to watch a CCTV-style video of a (staged) street fight, while in the presence of confederate bystanders who said they would have intervened in the brawl. The authors found that participants were significantly more likely to indicate they would have intervened when the person being attacked was an ingroup member, rather than an outgroup member. Furthermore, participants were significantly more likely to agree they would have helped if the bystanders watching the film with them were presented as ingroup rather than outgroup (Study 1). These effects were unrelated to emotional arousal or perceived attack severity (Study 2). These results suggest that not only is there a general ingroup bias in helping, but that people take heed of the group memberships of fellow bystanders, and how these bystanders are behaving. If fellow ingroup members intervene, the salient ingroup norm becomes one of pro-intervention, making other ingroup members more likely to intervene too (Levine & Cassidy, 2010). By neglecting the importance of the groups to which bystanders belong, theorists cannot appreciate the complexity and subtlety of the processes involved in emergency intervention.

Although this study only measured intent to help after an (alleged) event had occurred, Levine and Crowther (2008) used behavioural and non-behavioural measures in a follow-up study, to consider whether increasing the number of bystanders could actually *increase* intervention, depending on the social identities made salient in the context of the emergency. This work followed the logic of Rutkowski et al. (1983), who suggested that the traditional bystander effect occurs because bystanders cannot form a cohesive group. Specifically, Levine and Crowther

considered whether participants who find themselves amongst ingroup bystanders (and therefore experience high levels of cohesion, as well as pressure to conform to ingroup norms) will actually be *more* likely to intervene as the number of bystanders around them increases. The authors found evidence to support this claim: whilst the traditional bystander effect was observed when fellow bystanders were conceptualised as strangers (i.e., participants were more likely to intervene when there was one stranger bystander compared to five), the opposite result was observed when the fellow bystanders were conceptualised as friends by the participants (Study 1). Studies 2, 3 and 4 echoed and extended these results by considering the social identity of gender. In these studies, the authors found that, regardless of whether the helping situation and the bystanders were imagined or real (and whether the helping measure was behavioural or non-behavioural), female participants were more likely to intervene when in a group of women than when alone, but were less likely to intervene when in a group of men than when alone. These results suggest that the bystander effect is far more complex than once thought: it is not only group size that is important, but how the participant relates to the other bystanders in group-related terms. The authors suggested that it was the strong sense of group solidarity and cohesiveness created by the all-female group that increased helping behaviour to a higher level than that observed in the solitary female condition. The rich social environment within which such emergencies occur therefore appears to have important effects on helping behaviour, and such interactions involve complex understandings of group memberships and norms.

The studies by Levine et al. (2002) and Levine and Crowther (2008) suggest that any account of the bystander effect that neglects the importance of the helper's social identity will only ever be partial, thereby raising important questions for

proponents of the ‘traditional’ bystander effect. It seems that the group memberships of those involved in helping transactions have far-reaching consequences for who is likely to be offered help (and under what circumstances). Unfortunately, this aspect of emergency intervention has been consistently neglected in the traditional research. It appears that it is not only the number of bystanders that has an important effect on the likelihood of intervention: it is also vital to consider how the potential helper’s currently-salient identity helps them frame and define those bystanders, and how this process enables the potential helper to make sense of the emergency.

The Significance of Salient Identities and Group Boundaries

Qualitative research. This conclusion regarding the importance of salient identities to the helping transaction was given further weight by a number of other social identity-inspired studies. For instance, in terms of qualitative research, Levine (1999) analysed witness statements from the 1993 James Bulger murder trial, in an attempt to understand why none of the 38 witnesses called at the trial intervened when they saw the 30-month-old Bulger being led through the streets of Liverpool by his two young male murders. There are strong parallels between the Bulger case and Kitty Genovese’s murder (see Chapter 2): both led to public outcry and moral panic (particularly since, in the case of Bulger, the murderers were young children), (Levine, 1999). However, armed with knowledge regarding the significance of group identities in such situations, Levine was able to move beyond a ‘traditional’ analysis of this horrific case, which would likely have led to a replication of the conclusions reached by those investigating Genovese’s death. Instead, Levine concluded that the bystanders believed the three boys to be brothers, and thus members of a private family unit. In Western societies, it is often frowned upon for outgroup members to interfere in the activities of family members, particularly when the outgroup members

are adults, and the family members are young children (Broadhurst, 2007). Indeed, the murderers used their implicit knowledge of this fact to deflect bystanders' attention, by telling passers-by they were taking the distressed and wounded Bulger home to their mother. The lack of bystander intervention was therefore not due merely to the presence of other bystanders, but to the way in which the boys were categorised by those bystanders. Proponents of the traditional theory of bystander intervention cannot explain such subtle and complex effects.

Indeed, there is evidence to suggest that people have understood the significance of these group-related processes in helping situations for a relatively long time. For instance, Reicher, Cassidy, Wolpert, Hopkins and Levine (2006) carried out a qualitative analysis to investigate why Bulgaria was the only pro-German European nation to end World War Two with more Jewish inhabitants than when the war began. The researchers analysed public documents distributed in Bulgaria during the war, and found that the documents consistently described Jews as part of the Bulgarian national ingroup (rather than as an outgroup of 'community aliens', as they were perceived in Germany), (Peukert, 1987). The documents' authors, the Bulgarian readers and the Jews themselves were all conceptualised as members of one superordinate and inclusive national group, suggesting the documents' authors had explicit awareness of the important effects of group definitions on helping behaviour. Although Reicher et al.'s analysis was retrospective, it might help to explain why the Bulgarian people were so willing to help and support Jews within their community during a time of intense persecution. Indeed, this claim is supported by Oliner's (1992) study of those who risked their lives to help Jews in World War Two. Oliner's work indicated that those who helped tended to feel a strong sense of similarity between themselves and the Jews in their community. Again, this qualitative evidence

suggests that the fluidity of category memberships affects helping decisions, but this time in a context where both givers' and receivers' lives were at stake.

Quantitative research. There is also experimental evidence which highlights the important role that salient identities and group boundary definitions can play during helping transactions. For instance, Levine, Prosser, Evans and Reicher (2005) carried out two ingenious field-studies of helping behaviour, which echoed Latané & Darley's (1970) famously elaborate bystander intervention experiments. The authors recruited Manchester United football fans, and asked them to participate in a football-related study. Participants were asked to walk through some open ground to another building, so they could watch a film as part of the study. As they were walking, a confederate ahead of them pretended to trip and fall. He wore either a Manchester United (ingroup) football shirt, or a Liverpool (rival outgroup) football shirt. When participants' Manchester United group identity has been made salient before the incident, they were significantly more likely to help the ingroup member than the outgroup member (Study 1). Importantly, when participants' (more inclusive) 'football fan' identity was made salient, the confederate was equally likely to receive help regardless of which shirt he wore, since both Manchester United and Liverpool fans were now perceived to be members of the superordinate 'football fan' identity. Additionally, both Liverpool and Manchester United fans received more assistance than a confederate wearing an unbranded shirt, who could not be categorized as a member of this new 'football fan' group (Study 2). These results thus provide experimental support for the idea that group boundaries are malleable, and that this malleability has important effects on bystander intervention.

This finding regarding boundary flexibility has been supported by additional experimental work. For instance, Platow et al. (1999) found that Australian Rules

football fans wearing team insignia donated more money to charity collectors also wearing team insignia after a match took place than before it, regardless of which team the charity worker identified with. The authors suggested that after a match, the superordinate ‘football fan’ identity would be salient (rather than the subordinate ‘team’ identity), which would encourage fans to perceive members of both teams as ingroup, thereby increasing donations given to charity workers who identify with either of the two teams. This idea is supported by the fact that charity workers who did not wear insignia (and therefore would not be perceived as a member of the new superordinate ‘football fan’ group) experienced a decline in donations during the same period. Again, ingroup definitions seem to have profound effects on helping behaviour, and these definitions appear to be dynamic and context-dependent.

Wakefield et al. (in press) also utilized football insignia to highlight the role that group boundary definitions can play in the helping transaction. They found that a Chinese-heritage confederate who made a Scottish identity claim by wearing a Scottish shirt was perceived by Scottish participants as more Scottish (and was provided with more help) when participants were primed to consider the Scottish identity in inclusive (i.e., civic) rather than in exclusive (i.e., ethnic) terms (see Esses, Dovidio, Semenya, & Jackson, 2005). The authors argued that manipulating the boundaries of the Scottish identity (and thereby encouraging participants to perceive the confederate as a fellow Scot to a greater extent in the Civic condition) increased the amount of help participants extended to her.

The findings from these studies also provide support for the Common Ingroup Identity Model (e.g., Dovidio, Gaertner, Shnabel, Saguy, & Johnson, 2010; Dovidio et al., 1997), which involves the assumption that categorizing outgroup members as members of a more inclusive superordinate ingroup leads to increases in self-

disclosure and helping behaviour towards these (ex-) outgroup members. This model thus highlights the complexity and fluidity of group membership and group salience, and the important effects that categorization (and re-categorization) can have on individuals' cognitions and behaviour.

Indeed, in cases where individuals *do* help outgroup members, this type of re-categorization may actually happen automatically. Simon et al. (2000) compared the motivations experienced by both homosexuals and heterosexuals when volunteering for HIV/AIDS charities (a cause traditionally, if erroneously, seen as being related to the 'homosexual' categorization). The authors found that whereas homosexuals were more willing to volunteer when their homosexual identity was salient, heterosexuals were more willing to volunteer when they categorised themselves at an interpersonal level. Thus, the authors concluded that while homosexuals volunteered to help ingroup members (i.e. fellow gay people), heterosexuals volunteered to help human-kind (i.e., fellow people). Importantly, this affected how the volunteers categorised both the charity and the people it aimed to help. It therefore appears crucial to consider the relevance of categorization processes in order to understand people's motivations for helping others, both in the context of short-term (e.g., emergency) helping, and longer-term (e.g., voluntary) helping.

One final element of social categories that pertains to the helping transaction is the fact that they can have a spatial dimension: identity salience enables us to create connections with people *in places* (e.g., Novelli, Drury, & Reicher, 2010). From a helping transaction perspective, this observation has implications for the traditional notion of 'charity beginning at home', since it forces researchers to question exactly what (and where) home is, and how an understanding of home (or, more specifically, the dimensions of ingroup space) helps conceptualise giving behaviour. For instance,

Levine and Thompson (2007) found that when participants' British identity was salient, they were equally likely to provide financial and political aid to victims of natural disasters in Europe and in South America. When participants' European identity was salient, however, they were significantly more likely to donate to Europe than to South America. As the authors concluded, it does not appear to be the proximity of a disaster to one's home that affects likelihood of helping (as was commonly thought), but the way in which the location is categorized in the current context: 'ingroup places' are more likely to receive aid than 'outgroup places'. This again stands to highlight the fact that the subtle processes of group-boundary definition (and re-definition) have significant effects on the outcomes of helping transactions.

Concluding Comments

The work reviewed in the present chapter provides a very different perspective on the helping transaction than that afforded by the strongly interpersonal 'traditional' literature. By stepping back from the individual and appreciating how that individual operates within various social groups (and how they perceive and understand their membership of these groups), social identity theorists have challenged some of the central tenets of the helping transaction literature. Through a diverse range of qualitative and quantitative studies, these researchers have highlighted the significance of an idea that may at first seem too obvious to mention: that groups *matter*. Nonetheless, this deceptively simple statement masks a complex array of social identity-related principles; many of which have been shown to play important roles in driving helping-related decisions. For instance, the importance of who is perceived as ingroup has been highlighted numerous times by social identity researchers, and the revelation that the group memberships of the person in need *and*

fellow bystanders are both important has contributed to a re-conceptualisation of processes such as the bystander effect and the role of interpersonal attraction within the helping transaction. Such work therefore represents a significant sea-change for the helping transaction literature in social psychology, and helps to make the social identity approach highly influential in many other areas of the discipline.

Beyond this, the finding that ingroup boundaries can be manipulated (and that this manipulation has important implications for who is provided with help) represents another important shift in perspective for the domain. Conceptualising groups as dynamic and malleable categories enables researchers to obtain richer understandings of the complex processes involved in the helping transaction, and to think beyond the idea of ‘individuals helping individuals’. Such behaviour indicates a high level of cognitive sophistication, and awareness of the significance of group memberships to helping. The finding that such boundary manipulation may have contributed to lives being saved during World War Two cannot be ignored: groups are powerful entities, and an appreciation of this provides researchers with the ability to investigate the complexities of the helping transaction. It is for this reason that a social identity approach will be adopted in this thesis.

The final theoretical chapter of this thesis involves investigating and developing another aspect of group processes that is key for the studies that follow. Combining the social identity principle that ingroup members attempt to present a positive image of the ingroup to outgroups with the finding that acts of helping and help-seeking can be motivated by strategic attempts to manage how one is perceived by others (see Chapter 4), the next chapter describes how ingroup members may utilize helping transactions with the aim of attempting to protect and promote the *group’s* reputation and image. This involves considering the process of *meta-*

stereotyping and its implications for the helping transaction: ideas upon which the studies in this thesis build.

Chapter 6: Using Helping Transactions to Manage Ingroup Image

Just as there is evidence to support the idea that individuals consider (and become concerned by) how they are viewed by others, there is a body of literature which suggests that group members often reflect upon how their *ingroup* is perceived by outgroups (i.e., they possess group-related *evaluative concerns*), (see Vorauer, 2006). This indicates that the ‘higher-level’ strategic interpersonal behaviours discussed in Chapter 4 are also relevant in group-related contexts (e.g., Klein, Spears, & Reicher, 2007): an observation that is key for the studies in this thesis. The present chapter involves an analysis of group-related evaluative concerns, and then proceeds to consider evidence from social psychological studies which suggests that group members may use helping transactions to attempt to improve their group’s image and reputation.

More specifically, two different types of group-related evaluative concerns are considered. First, the body of literature investigating how groups can use helping transactions to manage and enhance the general impression they project to others is discussed. Second, the key concept of *meta-stereotyping* is introduced. This latter requires attention to the idea that group members have explicit awareness of how their group is perceived by specific outgroups, and that they may respond strategically in a bid to challenge or enhance these perceptions. This latter approach therefore involves moving beyond a simple projection of positive ingroup traits. Evidence is reported which suggests that group members may sometimes utilize helping transactions to attempt this image management.

These two approaches are now considered in turn.

Using the Helping Transaction to Promote and Enhance the Group’s Image

As discussed in Chapter 5, social identity theorists argue that one of the key goals of a committed ingroup member is to promote a positively distinct image of their group to outgroups, with the aim of enhancing the group's reputation. With this in mind, evidence has been reported to suggest that group members may use the helping transaction to enable such image-management to occur. For instance, van Leeuwen and Täuber (2010) considered the different group-related goals that help-giving could be used to achieve, and suggested that three core aims exist: *power and autonomy*, *impression formation* and *meaning and existence*. In support of social identity principles (and the previous discussion), van Leeuwen and Täuber argued that the over-arching theme of these aims is to promote the ingroup's positive distinctiveness in relation to outgroups.

In terms of *power and autonomy*, van Leeuwen and Täuber suggested that group members use helping to create and re-assert superiority over outgroups. This may be achieved by 'over-helping' or by giving assumptive help (Schneider, Major, Luhtanen, & Crocker, 1996). Since these forms of help are given without considering the individual's actual level of need, they are often used to highlight the ingroup's power and dominance. van Leeuwen and Täuber's work therefore reinforces the key idea from previous chapters that, far from being benevolent, helping behaviour can sometimes be highly calculated, and deployed almost solely for the benefit of the ingroup's image.

Similarly, in terms of *impression formation*, van Leeuwen and Täuber suggested that help-giving can be a useful way to present a positive image of the group to others. For instance, helping enables group members to indicate that their group possesses warmth. Since helping is perceived as a moral act, it can be a way to demonstrate (or cultivate) the ingroup's image of benevolence and kindness,

especially when one is aware that outgroup members are judging the ingroup. For instance, the authors reported a study by van Leeuwen and Oostenbrink (2005), where University students were more likely to help a 'lost' confederate find his way to a location on-campus when he was ostensibly writing a thesis on how an outgroup University views the participants' University, compared to a neutral topic (IT facilities). Importantly, this effect only occurred if the confederate was presented as an outgroup member (rather than an ingroup member). This suggests that participants' desires to present the ingroup as kind and helpful when they are knowingly being evaluated by the outgroup may actually over-ride the well-established preference to help ingroup members over outgroup members (e.g., Levine et al., 2005).

In a similar vein, helping can also highlight ingroup competence, since the behaviour indicates the possession of skills and resources. For instance, van Leeuwen and Täuber found that participants were only likely to share their answers on a knowledge quiz with an outgroup if they themselves were doing well on the quiz. If the participants shared (possibly incorrect) answers with the outgroup when they themselves were doing badly, then this would not highlight the ingroup's knowledge and abilities, although the act of helping would have been identical in both conditions.

Finally, in terms of *meaning and existence* strategies, van Leeuwen and Täuber suggested that helping can be used to enhance and protect the ingroup's positive distinctiveness, and supported this claim with results from van Leeuwen (2007). In this work, the author demonstrated that helping can be a way to bolster threatened ingroup identities. van Leeuwen asked Dutch participants to consider their nation's uncertain future in the European Union, with the aim of threatening their national identity. She found that, compared to participants whose identity had not been threatened, these participants were more likely to advocate helping tsunami

victims in specifically ‘Dutch’ ways (i.e., by providing expertise on water management and sending Dutch royalty to the affected countries). Furthermore, these individuals endorsed the idea of giving aid in a highly coordinated manner, so as to enable the Dutch to have maximum control over help deployment. Again, these findings indicate that the identity-threatened participants were not advocating aid-giving due to purely sympathetic motivations towards disaster victims. Rather, helping was a medium through which they could attempt to enhance and strengthen their threatened national identity: to highlight the ingroup’s distinctiveness, power and resources.

Intergroup Helping as Status Relations. These helping-transaction-related concepts of power and resources (as well as the issue of status) have been investigated in some detail by Nadler with his Intergroup Helping as Status Relations (IHSR) model (e.g., Nadler & Halabi, 2006). With this work, Nadler extended his Threat to Self-Esteem model (Fisher et al., 1978, see Chapter 3) to investigate helping transactions in the context of intergroup relations. Nadler’s conceptualisation (2002) and testing (e.g., Halabi & Nadler, 2010; Nadler, 2010; Nadler & Halabi, 2006) of his IHSR model involved him considering the often-neglected fact that donor groups hold a position of power over recipient groups, which leads to the creation of a status hierarchy. Groups can therefore use helping to maintain their dominance over outgroups, or to improve their relative status if it has been threatened or questioned (Nadler defined this *defensive helping*), (Nadler, Harpaz-Gorodeisky, & Ben-David, 2009).

Importantly, highlighting the ingroup’s high status (especially in cases where the stability or legitimacy of that status has been questioned) can be a way for ingroup members to enhance the image of the ingroup they project to outgroups, thereby

enabling them to present the ingroup in a more positive (and distinctive) light. To do this, group members are likely to provide the type of help that van Leeuwen's participants wished to give: aid that can be controlled and managed by the source (the typical 'tied aid' described in Chapter 1). Such aid is deployed with the aim of enhancing and emphasizing the status inequality between groups. Nadler (e.g., 1998; 2010) defined this type of help as *dependency-based* and *assumptive*, as opposed to *autonomy-based* and *responsive*, where the recipient is given more freedom and choice over how the aid is used, and the aid is more appropriate in type and quantity.

Nadler and colleagues supported these claims with various experiments. For instance, they found that Israeli children in a minimal group study provided most help to the outgroup when that outgroup threatened the status of the ingroup (by performing better than the ingroup on a task), and when they themselves identified highly with their group (and therefore presumably cared strongly about their group and its relative status), (Nadler et al., 2009, Study 1). Nadler and colleagues' second study revealed that this desire to help members of a potentially-threatening outgroup is unrelated to levels of need displayed by outgroup members, and that the effect can be observed in established groups as well as minimal ones. This indicates that the helping behaviour was motivated by underlying impression-management goals: rather than aiming to meet the needs of outgroup members, participants used this apparently normative and praise-worthy behaviour primarily as a strategic tool, to defend their group in the face of a potential threat to its image.

Cunningham and Platow (2007) obtained further evidence to support the status relations model by considering when high-status groups are likely to provide empowerment-based (or autonomous) help to lower-status outgroups. As predicted by Nadler, they found that such help was only given when the status hierarchy was

perceived as stable. This was compared to help directed towards the ingroup, which was likely to be empowerment-based regardless of the nature of the status hierarchy. Evidently, in cases where the hierarchy is stable, the dominance of high-status groups is not challenged or questioned, so such groups are less motivated to exemplify their superiority through highly-controlled dependency-based help. Instead, they can be less strategic, and relax their control over the lower-status outgroup, by providing autonomy-based help. It therefore seems that (as implied by Nadler's model) high-status groups use strategic giving in a careful and rational manner, and certainly do not use it all the time.

This conclusion also supports the empirical findings of Jackson and Esses (2000), which revealed that Canadians are more likely to support non-empowering than empowering forms of help for immigrants, especially when the immigrants' economic achievements were perceived as threatening to Canada's status and image (Study 1). There is therefore growing evidence to support the idea that giving is widely recognised as a valuable group-image protection strategy in cases of status stability threat.

Importantly (and rarely for such theorists), Nadler (2002) also considered his IHSR model from the point-of-view of the help-recipient. Nadler argued that the key concepts of the intergroup helping interaction are those of *legitimacy* and *stability*. If members of the low-status group believe the status inequality to be legitimate and stable, they will not be averse to receiving help from the higher-status group, since such behaviour is in-keeping with their perceptions of the status hierarchy. On the other hand, if members of the low-status group believe the intergroup status inequality to be illegitimate and unstable, they are likely to be highly reluctant to receive help from the higher-status group, since such behaviour is likely to maintain and reinforce

an unfair and illegitimate status hierarchy, and has the potential to damage the ingroup's image and exacerbate its low status. Instead, members of low status groups might try to improve their status through direct methods, such as appealing to the government or engaging in self-help (Nadler, 2002). Paradoxically, it is this precise combination of illegitimacy and instability that motivates high-status groups to attempt to wield their power over lower-status groups, by giving dependency-based help in order to enhance and strengthen the fragile status hierarchy (Nadler et al., 2009). It therefore appears that in many cases, the strategic aims and motivations of high- and low-status groups may clash, leading to misunderstandings and poor intergroup relations. Indeed, MacLachlan and Carr's (2005) 'Pay Me!' phenomenon described in Chapter 1 is a good example of this, since it involves recipients attempting to regain a sense of agency and dignity in the face of 'well-meaning' aid-giving by developed nations.

Nadler and Halabi (2006) tested these assumptions about aid-recipients in a topical context: by recruiting Arab and Israeli participants in Israel. In Study 2, they found that when the status hierarchy was defined as unstable and Arab students were assisted on a psychometric test by an Israeli, they experienced lower affect and more ingroup favouritism and outgroup derogation (compared to when the helper was an Arab). The authors interpreted these results as evidence of the negativity that members of lower-status groups experience when forced to accept potentially image-damaging help from unstably higher-status groups. Furthermore, the perceived stability of the status hierarchy had no effect on participants' responses when the helper was an ingroup member, since seeking help in this context posed no threat to the reputation and relative status of the ingroup. The researchers found that these negative responses were particularly pronounced when participants were high ingroup

identifiers (who presumably cared deeply about the ingroup's reputation), and they also found that when high ingroup identifiers were able to choose whether or not to obtain assistance, they were unlikely to accept help (Studies 3 & 4). These results suggest participants' behaviour was indeed motivated by group identity and reputation management concerns: by refusing help from an unstably superior outgroup, highly-identifying participants could attempt to enhance the image of the ingroup, and to avoid exacerbating its low status.

Introducing the Concept of Meta-Stereotypes

As the previous section indicates, there is growing social psychological evidence to support the idea that group members may use acts of helping and help-seeking to project and promote a positive image of their ingroup (particularly in circumstances where that image is threatened, or the status of the group is questioned). However, there is another context in which the helping transaction may be used to manage the ingroup's reputation, and this involves using such behaviours to attempt to challenge the contents of meta-stereotypes. *Meta-stereotypes* are perceptions that are believed to be held about the ingroup by specific outgroups. This makes them context-dependent: for instance, the stereotype of the Scots held by the English is likely to be different to the stereotype of the Scots held by the French, and the Scots are likely to be aware of this (Vorauer, Hunter, Main, & Roy, 2000). Meta-stereotypes tend to be negative, and usually fall into one of two groups: *latent social pathologies* (such as ingroup members being stereotyped as violent, criminal or drug-addicts), or *inferiority* (such as ingroup members being stereotyped as dependent, lazy or possessing weak morals), (Sigelman & Tuch, 1997). Meta-stereotypes are therefore often considered unfair and harmful to members of the ingroup (Vorauer, Main, & O'Connell, 1998). Vorauer et al. (1998) concluded that meta-stereotypes have

powerful effects during intergroup interactions, and are notoriously persistent, even if they eventually become invalid and anachronistic ways to conceptualise the outgroup's perceptions of the ingroup.

Meta-Stereotype Activation

Meta-stereotypes appear to be activated more easily when ingroup members believe they are being socially evaluated, or expect to meet members of the outgroup that is stereotyping them (Vorauer et al., 2000). As might be expected, activation is also enhanced for individuals who experience high levels of concern about public evaluation or perceive the ingroup as especially central to their self-concept (Vorauer et al., 2000). Meta-stereotype activation is also highly likely when the (stereotyping) outgroup is perceived to be superior to or more powerful than the (stereotyped) ingroup. This is because it is in this type of scenario that ingroup members are particularly interested to learn about how they are judged and evaluated by members of a powerful outgroup, who may control the ingroup's access to resources and have the ability to impose sanctions (Lammers, Gordijn, & Otten, 2008). Indeed, Lammers et al. found that ingroup meta-stereotype activation is mediated by the process of ingroup members taking the perspective of the outgroup, which suggests that considering the contents of meta-stereotypes may allow ingroup members to gain an appreciation of how they are seen by more powerful (and resource-wielding) outgroups. However, as meta-stereotypes tend to be rather negative, this activation can be threatening for ingroup members, because it often highlights the fact that the outgroup's perceptions of the ingroup are not entirely favourable.

Meta-Stereotype Accuracy

It is important to remember that meta-stereotypes involve what ingroup members *believe* that outgroup members think about the ingroup, rather than what the

outgroup actually thinks. This means there is the potential for meta-stereotypes to be inaccurate. For instance, *transparency overestimation* may occur, where ingroup members forget they have access to privileged internal information about their own thoughts and feelings, which outgroup members simply cannot access (Vorauer & Ross, 1999). Similarly, the *false consensus effect* can occur, where ingroup members fail to appreciate the (often large) discrepancies between their own perceptions and the perceptions of outgroup members (Frey & Tropp, 2006). Nevertheless, there is evidence to suggest that meta-stereotypes are often a reasonably accurate representation of what the outgroup actually thinks about the ingroup. For instance, Sigelman and Tuch (1997) found a strong link between how Black Americans believe that White Americans perceive them, and how they are actually perceived by White Americans. In some cases at least, meta-stereotypes therefore seem to be a true reflection of how outgroup members perceive the ingroup (although there is always potential for inaccuracies to occur).

Effect of Meta-Stereotypes on Social Interactions

Whether accurate or not, dwelling on meta-stereotypes about one's group has the potential to impact upon social interactions and actually *worsen* the outgroup's perceptions of the ingroup (Frey & Tropp, 2006). For instance, Vorauer et al. (1998) found that when ingroup members expect to be stereotyped, they experience reduced anticipated enjoyment of a proceeding intergroup social interaction. The authors argued that this is likely to negatively affect ingroup members' behaviour during the interaction, leading to a self-fulfilling prophecy, where outgroup members are actually more likely to stereotype ingroup members with whom they are communicating. This means that, inadvertently, ingroup members may confirm the stereotype through their awkward behaviour (Klein & Snyder, 2003).

Meta-stereotypes also have the potential to affect how ingroup members view intergroup interactions, and how they think about the outgroup. Kim and Oe (2009) found that although Japanese participants' stereotypes of Koreans did not correlate with their implicit appraisals of the Korean outgroup, their meta-stereotypes (i.e., how they believed they are stereotyped by the Koreans) did. Japanese individuals who believe they are stereotyped negatively by the Koreans may therefore be prone to stereotyping Koreans in a negative light themselves. Taken together, these results suggest that salient meta-stereotypes are powerful, and have the potential to affect intergroup interactions in rather negative ways.

Fear of Confirming Meta-Stereotypes: Social Identity Threat

As mentioned previously, the nature of salient meta-stereotypes means that being aware of them can be a threatening experience for ingroup members. A key aspect of stereotyping is that it involves a value judgement on the part of the group endorsing the stereotype: the stereotyping group is essentially judging the stereotyped group on a specific dimension or criterion deemed important or significant. Furthermore, in making this judgement, the stereotyping outgroup members also imply something about themselves: they are suggesting that while members of the stereotyped group fail to achieve this criterion (e.g., they are dependent or unintelligent), they themselves have attained this goal (e.g., we are more independent or intelligent than them). The very act of stereotyping another group therefore allows group members to distinguish themselves from that group in a positive manner, using criteria they perceive as valuable and desirable (Kamans, Gordijn, Oldenhuis, & Otten, 2009; Klein & Snyder, 2003). Being stereotyped is therefore likely to be a threatening experience for ingroup members, since it affects the ingroup's social image, status and positive distinctiveness.

However, salient meta-stereotypes pose an additional type of threat to ingroup members. This relates to the fact that, as mentioned already, ingroup members themselves have the potential to *confirm* meta-stereotypes through their behaviour. Doing this could reinforce the stereotype, and would thus create additional threat to the positive distinctiveness and reputation of the ingroup. By providing evidence to support the existence of the meta-stereotype, the stereotyping group would be vindicated, their dominance over the stereotyped group would be maintained, and they would be likely to stereotype the ingroup even more in future interactions (Klein & Snyder, 2003). Shelton, Richeson and Vorauer (2006, p. 322) defined this as *social identity threat*: “a concern that one will...confirm the stereotypes associated with one’s group.”

Social Identity Threat vs. Stereotype Threat. There are key distinctions to be made between social identity threat and *stereotype threat* (e.g., Aronson, Lustina, Good, Keough, & Steele, 1999; Spencer, Steele, & Quinn, 1999). Although stereotype threat is not the focus of this thesis, it is important to note how it differs from social identity threat. While social identity threat theory focuses on concerns regarding the confirmation of stereotypes during social interactions, stereotype threat theory considers how ingroup members’ performance on a domain-relevant task can be disrupted due to concerns they will confirm a competence-related stereotype through their behaviour (such as women performing badly on a maths test after the stereotype of women being bad at maths is activated implicitly), (Shelton et al., 2006). Stereotype threat is therefore a specific type of social identity threat, but is generally more narrowly defined. Additionally, the primary result of stereotype threat is usually disruptions in task performance due to evaluative concerns (although see below for other noteworthy effects). This is unlikely to be an outcome of more general forms of

social identity threat, since such situations involve more generic social interaction, rather than evaluation on a domain-relevant task. Indeed, Shelton et al. (2006) suggested that stereotype threat occurs when concerns experienced by participants are imposed by the experimental paradigm, and that these paradigms usually involve participants engaging in competency-related tasks, such as tests or assessments.

Ingroup Members' Responses to Social Identity Threat

A number of compensatory strategies are available to ingroup members who experience stereotyping (and the fear of confirming that stereotype). First, it is important to consider whether the ingroup member is experiencing *stigma consciousness*: an awareness of the fact that outgroup members perceive them as a typical member of the stereotyped group (Klein & Snyder, 2003). Klein and Snyder noted that stigma consciousness increases when the individual's ingroup identity becomes salient, or when they deem themselves to be especially visible to members of the stereotyping outgroup. The strategies outlined below assume the group member is experiencing stigma consciousness: if they are not, then they will not have the awareness required in order to engage in strategic behaviour (Klein & Snyder, 2003).

Shelton and colleagues (2006) examined three potential responses to social identity threat. Although it is the third type of response that is crucial for this thesis, the other two are also worthy of note. First, group members may engage in *defensive cowering* (Goffman, 1963): to escape the social interaction from which the threat may develop, or possibly to avoid participating in it entirely (thereby preventing the threat from occurring). This response may actually be observed in some cases of stereotype threat, such as when stereotype-threatened women in Davies, Spencer, Quinn and Gerhardtstein's (2002) studies indicated a preference for verbal-based university degrees and jobs over mathematics-based ones. The authors argued that such

behaviours meant the women could reduce the extent to which they were evaluated in terms of the stereotype: by not even entering situations which could lead to them being judged in stereotypical ways, the women were able to cope with the stereotype threat they were experiencing. Clearly, however, this strategy may not be ideal: it increases the chance of the women dis-identifying with domains such as mathematics entirely, thereby encouraging stereotype persistence (Davies et al., 2002; Klein & Snyder, 2003).

Second, the ingroup member may either dismiss the outgroup's perspective entirely, or derogate the outgroup member who espoused it. High ingroup identifiers are especially likely to dismiss the outgroup's perspective and to instead reinforce the importance of the ingroup's experiences, history and culture. High-status groups are especially likely to derogate and devalue the low-status outgroup who espoused the stereotype (Shelton et al., 2006).

Importantly for this thesis, the ingroup member may respond in a third way: by altering their own behaviour in a deliberate attempt to reduce the identity threat they are experiencing. Before they can be motivated to react to a meta-stereotype in this way, ingroup members should satisfy a number of criteria. First, they should perceive the meta-stereotype as an unfair or illegitimate depiction of the ingroup (Hopkins et al., 2007). Furthermore, those highly prejudiced against the outgroup (who therefore believe that outgroup members are more likely to react to the ingroup in terms of the stereotype) are more likely to alter their behaviour in response to the meta-stereotype (compared to lower-prejudiced individuals) (Kamans et al., 2009). Finally, those who feel the outgroup has used the stereotype to judge them *personally* are more likely to alter their behaviour (Kamans et al., 2009). Any one of these factors

(or a combination of them) is likely to lead to ingroup members' awareness of the meta-stereotype translating into behavioural reactions.

The key aim of this behavioural response is usually to strategically *challenge* the meta-stereotype (thereby showing 'we are not actually like that'). However, before discussing examples of this challenging tendency, it is important to note that it is also possible for ingroup members to *confirm* the meta-stereotype through their behaviour. There are two types of confirmatory acts: accidental confirmation and deliberate (or strategic) confirmation (Klein & Snyder, 2003). Accidental confirmation commonly occurs when ingroup members are not stigma conscious, so they do not engage in defensive strategies. Instead, their primary aim is usually to ensure that the interaction between themselves and the outgroup member develops smoothly, which is often best achieved by copying the outgroup member's conversational style. However, since the outgroup member is stereotyping the ingroup member, the outgroup member is likely to interact with the ingroup member in a rather awkward and aloof manner. Copying this interaction style therefore means that the ingroup member will inadvertently confirm the meta-stereotype through their own behaviour (Klein & Snyder, 2003).

Deliberate confirmation is sometimes known as a *compliance effect*. This may occur when the 'negative' meta-stereotype in question could also be perceived in positive terms (e.g., as non-conformist or rebellious), such as laziness or criminality (Kamans et al., 2009; Lammers et al., 2008), or in cases where ingroup members believe they might be rewarded for behaving in meta-stereotype consistent ways, such as women have to interact with sexist employers at an interview (von Baeyer, Sherk, & Zanna, 1981). Deliberate confirmation can also happen in cases where confirming a negative stereotype (e.g., incompetence) would also result in confirmation of a

positive stereotype (e.g., warmth), or in situations where the ingroup member actually believes the stereotype to be true (Klein & Snyder, 2003). In instances such as these, the personal benefits of confirming the stereotype (such as gaining a job in a male-dominated company, being seen as warm or being feared by others) may outweigh the disadvantages that it brings to the ingroup (i.e., confirming and reinforcing unfair negative stereotypes). However, although confirmation may be a relevant response to some meta-stereotypes in specific situations, there are likely to be times when confirming a meta-stereotype is construed as unhelpful by ingroup members, and attempting to challenge the meta-stereotype becomes a more appealing prospect.

Klein and Snyder (2003) noted that a collective attempt to challenge how the ingroup is perceived by outgroups (i.e., a desire to enact *stereotype change*) is most likely to occur when the ingroup member in question identifies highly with the group, the ingroup boundaries are deemed to be impermeable (so one cannot distance oneself from the stereotype by leaving the group), and there are cognitive alternatives to how the ingroup is perceived. Engaging with cognitive alternatives might include ingroup members focussing on positive ingroup stereotypes or traits (e.g., warmth) instead of the negative one (e.g., lack of competence), (Yzerbyt, Provost, & Corneille, 2005). Alternatively, group members may use creative ways to ‘re-brand’ negative stereotypes and images as positive ones, such as the ‘Black is Beautiful’ movement that emerged in 1960’s USA (Tajfel, 1981). Without such cognitive alternatives, ingroup members may simply ignore how they are perceived, or may actually endorse the perceptions and attempt to confirm them through their behaviour.

Supporting Klein and Snyder’s description of the stereotype change phenomenon, Klein and Azzi (2001) focused their research on group members’ responses to being stereotyped. They concluded that Belgians who were encouraged

to consider how they are viewed by the French (while in the presence of a French audience) reported that Belgians (as a group) do not possess the negative traits ascribed to them, but that they do possess the positive traits ascribed to them. This process of selective stereotype confirmation is therefore another strategy that group members may use to attempt to enhance the group's image: by reinforcing the positive aspects of stereotypes and challenging the negative aspects, group members have the potential to manipulate the contents of meta-stereotypes.

The significance of the helping transaction. Importantly for this thesis, Hopkins et al. (2007) considered how ingroup members can attempt to challenge negative meta-stereotypes through the act of help-giving. Recruiting Scottish undergraduate students, they found that the Scots believe they are stereotyped as unfairly mean by the English (with perceived unfairness being an important prerequisite for meta-stereotype challenging behaviour to occur). Furthermore, the researchers found that when this meta-stereotype was made salient in the presence of an outgroup audience (i.e., English experimenters), participants were more likely to agree they would provide assistance to members of a third-party outgroup rather than to members of the ingroup (Study 1). This suggests that the concept of strategic reputation management was important to these participants: they realised that helping one's own ingroup would not provide satisfactory evidence to challenge the negative meta-stereotype (due to common knowledge of the natural ingroup helping bias), but that outgroup giving would provide such evidence. Furthermore, compared to the control condition, participants in the meta-stereotype condition stated that Scots give significantly more to charity and are significantly more generous overall (Study 2). This is in-keeping with Klein and Azzi's (2001) selective confirmation findings: by highlighting the generosity of the Scots, participants were able to use examples of

Scottish giving to attempt to challenge (and possibly alter) the way in which the ingroup was perceived.

Hopkins et al. expanded on Klein and Azzi's (2001) work by presenting behavioural evidence to support their claims. Specifically, they found that participants in the meta-stereotype salient condition were willing to spend significantly more money on raffle tickets for an outgroup charity (but not for an ingroup charity), compared to participants in the control condition (Study 3). Again, this highlights the strategic nature of the participants' behaviour: helping only increased in the meta-stereotype salient condition when the act would enable participants to challenge the negative meta-stereotype to the English audience in an effective manner (i.e., when the aid-recipient was an outgroup charity, not an ingroup one). Rather than giving due to feelings of sympathy for a worthy cause, these participants gave to improve the ingroup's reputation. The authors argued that since giving is usually interpreted as a selfless act in Western cultures (rather than a strategic response to a meta-stereotype), it is likely that such behaviour would be perceived by outgroups as genuinely benevolent, making it an effective way to attempt to challenge the meta-stereotype (as has been mentioned previously). This makes strategic giving an especially powerful tool for attempting to improve the reputation of one's group in the context of salient meta-stereotypes, since it appears to be a strategy largely beyond suspicion. Furthermore, it suggests that the motives for giving to outgroup members may be very different from the motives for giving to ingroup members (Stürmer & Snyder, 2010b), see Chapter 5.

Concluding Comments and Future Directions

Maintaining a positive image of the ingroup appears to be highly important for ingroup members, and can be a source of much concern. These anxieties may often

originate from a general desire to ensure the group is presented positively and distinctively, and social psychological evidence has been provided to support the idea that group members may utilize helping transactions to enable this goal to be achieved. Although much of this evidence focussed on the act of helping (as with van Leeuwen and Täuber's (2010) taxonomy of helping-related identity-enhancement strategies), Nadler used his Intergroup Helping as Status Relations Model to consider how groups can use help-refusal as a status- and identity-management strategy. It therefore appears that groups on both sides of the helping transaction are aware of the potential they have to affect the image of the ingroup that is projected to the world.

Importantly, however, a second type of image-management strategy was considered: the act of attempting to challenge or disconfirm specific meta-stereotypes. This research moves beyond a general appreciation of how ingroup members react when they believe that the ingroup is being evaluated by outgroup members (as in van Leeuwen and Oostenbrink's (2005) university campus study). Instead, meta-stereotype salience involves awareness of exactly *how* one is perceived by a specific outgroup, and, in cases where (rightly or wrongly) the ingroup member concludes that these perceptions are unfavourable, the result can be feelings of concern for the group's reputation. Although activating meta-stereotypes provides group members with information regarding how the ingroup is perceived by outgroups, meta-stereotypes can be a source of threat themselves, and dwelling on them may lead to fear of accidental confirmation of their contents.

There is evidence to suggest that, in certain cases, awareness of being stereotyped may motivate group members to *challenge* outgroup perceptions. Although limited, there is work to support the idea that group members may again use the helping transaction to attempt to achieve this: something particularly evident in

Hopkins et al.'s (2007) help-giving work. This observation reinforces one of the key conclusions from previous chapters: that, contrary to popular belief, the act of helping is not always imbued with purely benevolent and selfless motivations. Instead, it is possible that intergroup helping behaviour represents a strategic attempt to challenge a salient meta-stereotype. This realisation that group-related helping can be strategic has important implications, both for social psychology and for groups engaging in real-world helping transactions. Although previous chapters suggested that strategic engagement in the helping transaction is not a new concept, the idea that group members can use such transactions to manage the image of their group is a relatively novel prospect in social psychology. While this concept lends weight to social identity-inspired analyses of the helping transaction, it also helps to expand and extend these analyses. By showing that ingroup members do not always display a preference for intragroup helping (and may actually have specific reasons for preferring to help *outgroup* members in some contexts), this research helps to shed light on the identity-related processes underlying intergroup helping interactions. This represents a significant contribution to the literature, and enables social identity theorists to present a more rounded and balanced account of the helping transaction, rather than simply concluding that 'we help people who are similar to us' (a limitation of SIT noted by Stürmer & Snyder, 2010a).

Thesis Aims

One important critique of the strategic helping transaction literature is that it fails to consider *help-seeking* as a meta-stereotype-challenging tool. Although Nadler and colleagues (e.g., Nadler & Halabi, 2006) considered the intergroup helping transaction from the recipient's perspective, their account focussed on how help-recipients use helping transactions to enhance the ingroup's status and image. This

analysis does not consider the meta-stereotype-challenging aspect of the helping transaction discussed in the present chapter (indeed, *any* conceptualisation of help-seeking as explicitly strategic remains relatively rare in social psychology; see Chapter 4). The central aim of this thesis is to attempt to remedy this issue, by investigating whether group members deploy help-seeking behaviour in a strategic attempt to challenge salient negative meta-stereotypes (an idea defined and referred to in this thesis as the *strategic help-seeking hypothesis*).¹ This aim incorporates the same logic as Hopkins et al.'s (2007) work on meta-stereotype challenging behaviour, but instead considers the key role that help-seeking can play in such intergroup interactions. This is not only intended to provide additional evidence of strategic group-related behaviour, but also to reinforce the idea that group members' help-seeking is not always related to absolute levels of need. Instead, the choice to seek help (or refrain from seeking it) may be bound up with concern for the image of the ingroup, and may represent strategic attempts to protect or improve that image in the context of a salient meta-stereotype.

As in Hopkins et al.'s (2007) work, participants in these studies are encouraged to consider the contents of a negative meta-stereotype about their group. In most cases, the meta-stereotype relates to the concept of dependency: something inherently bound up with the act of seeking help. By then providing participants with the opportunity to seek help from members of the group which apparently espoused the stereotype (i.e., the individuals that participants would wish to witness their stereotype-challenging attempts), the concept of strategic help-seeking behaviour can be investigated. Participants engaging in strategic behaviour would be expected to seek *less* help than participants not exposed to the dependency-related meta-

¹ It should be noted that the phrase 'strategic help-seeking hypothesis' refers to both strategic help-seeking and strategic *help-refusal*. Both behaviours will be addressed in this thesis.

stereotype (and thus not experiencing evaluative concerns). This should be independent of participants' levels of need, thus indicating that participants' help-seeking behaviour is affected by their desire to challenge the meta-stereotype to those who espoused it.

Although authors such as Nadler (e.g., Nadler & Halabi, 2006) considered how needy group members refrain from seeking help in order to protect the ingroup's status in intergroup contexts, such research does not consider the role that salient meta-stereotypes play in such interactions, and how meta-stereotype-related evaluative concerns might be bound up with the act of help-seeking. As Vorauer (2006) highlighted in her discussion of evaluative concerns, meta-stereotypes can have dramatic effects on intergroup interactions. By investigating the possibility that help-seeking behaviour might represent a strategic response to a salient meta-stereotype, these studies are designed to develop theoretical understandings of intergroup helping transactions and focus on the (neglected) role of the recipient.

Taking heed of the contents of a salient meta-stereotype and then deciding on a potentially-effective challenging strategy in this manner requires relatively high levels of insight and cognitive sophistication: traits more likely to be attributed to helpers than help-receivers in the literature (DePaulo et al., 1983). These studies therefore also aim to question implicit assumptions about help-seekers and help-receivers (in both theoretical and 'real-world' contexts). By presenting help-seekers in the way Hopkins et al. (2007) presented helpers (i.e., as cognitively sophisticated group members wishing to protect the group's image), these studies aim to challenge 'common-sense' assumptions about people who seek help. There are now large anthropological, sociological and social psychological literatures suggesting that help is rarely sought in an unthinking and purely need-based manner (see previous

chapters), and these studies are intended to build on this work by highlighting the fact that the deployment of help-seeking can be deliberately strategic in the context of salient meta-stereotypes.

Furthermore, an important sub-aim of this thesis is to investigate these issues with behavioural measures whenever possible. Due to the helping transaction being rooted in behaviours and actions (rather than attitudes and intentions), this research comes from a heritage of somewhat elaborate field experiments (e.g., Latané & Darley, 1970; Levine et al., 2005). In-keeping with these traditions, most of the studies in this thesis require participants to attempt real (laboratory-based) tasks, and then engage in actual help-seeking. Although this represents a significant challenge to the researcher, it enables participants to be presented with the most realistic (yet controlled) context possible, and allows help-seeking to be measured in a relatively naturalistic setting.

In summary, by making relevant social identities salient and adopting behavioural designs, these studies are intended to provide evidence to support the concept of strategic receiving behaviour in the context of salient meta-stereotypes. This work therefore represents an important addition to the social psychological literature.

Chapter 7

Study 1: An initial exploration of participants' willingness to engage in strategic help-seeking behaviour.

The key aim of the first study in this thesis was to examine whether it is possible to create a context in which group members would be unwilling to seek help due to concerns that doing so would confirm a negative stereotype of their group. This study was thus intended to provide initial exploration of the strategic help-seeking hypothesis, by showing that the same act of help-seeking can be perceived differently depending on the nature of the social context.¹ Although studies incorporating behavioural measures of help-seeking will be presented throughout this thesis, the exploratory nature of this first study meant that participants' self-reported *willingness* to seek help was investigated, along with their perceptions of the act of help-seeking.

Design and Predictions

To explore these issues, a two-condition independent-measures design was utilized (experimental condition vs. control condition). Participants in the experimental condition were encouraged to think of themselves as members of their gender group (i.e., female participants were encouraged to categorize fellow women as ingroup and men as outgroup). This identity is particularly suitable for use in this thesis, since well-known and well-rehearsed stereotypes exist concerning gender and help-seeking (see Chapter 3). Indeed, the stereotype of female dependency and communion (i.e., that women are perceived as overly-reliant on help and assistance, Moskowitz et al., 1994) is particularly relevant, and is likely to be activated relatively easily in such contexts. This ease of activation (coupled with the fact that gender is a

¹ The phrases 'strategic help-seeking' and 'strategic receiving' will be used interchangeably in this thesis. Recall also that these phrases can refer to either help-seeking or help-seeking *avoidance*.

category to which everyone can relate, and is likely to be an important influence in many people's lives) was expected to promote help-seeking reluctance and general feelings of negativity towards the act of help-seeking in this condition (hereafter known as the Gender condition). This is because the Gender condition was intended to involve a context where help-seeking behaviour had the potential to confirm a stereotype of female dependency to a male (outgroup) audience.

Such image-related concerns were not predicted to be activated in the control condition. Here, an alternative identity that was *unrelated* to the stereotype of dependency was made salient: participants' Psychologist identity. Participants in this condition (hereafter known as the Psychologist condition) were thus predicted to be more willing to seek help (and to perceive the act of help-seeking in more positive terms), since they should lack the image-related concerns experienced by participants in the experimental condition.

To investigate these predictions, female Psychology undergraduates were presented with a brief text-based vignette, and were asked to imagine themselves in the scenario. The vignette described a time in the future where the participants were Psychology graduates experiencing stress in their job at an advertising agency, and had to decide whether to seek help in an attempt to alleviate this problem. The single potential helper mentioned in the vignette was described as a male employee (Mark), who had also obtained a Psychology degree at a local (relatively prestigious) University. As described above, it was predicted that the way in which the nature of the potential help was understood and conceptualised by participants would be a function of the experimental manipulations.

To achieve these manipulations, participants in both conditions were presented with a list of traditionally 'masculine' and 'feminine' traits from the Bem Sex Role

Inventory (Bem, 1974), and rated the extent to which either women (in the Gender condition) or Psychologists (in the Psychologist condition) possessed each of these traits. It was expected that completing this task would encourage participants to think about their membership of these respective groups, thus making their female/Psychologist identity salient (depending on condition).

The trait-rating manipulation had an additional aim in the Gender condition. By rating the extent to which women possess both ‘warm’ feminine traits (e.g., *kind* and *compassionate*), and ‘cold’ masculine traits (e.g., *hostile* and *forceful*), it was hoped that Gender condition participants would consider the fact that there are key elements upon which men and women (stereotypically) differ (i.e., ‘*we are not like this, but men are*’). The aim of the manipulation in this condition was therefore not only to make participants’ female identity salient, but to make the *differences* between men and women salient (i.e., to create an intergroup context through the promotion of meta-contrast, Turner et al., 1987). This meta-contrast was intended to activate the well-known meta-stereotype of female dependency and communion (see Chapter 3, e.g., DeWall, Altermatt, & Thompson, 2005; Moskowitz et al., 1994). Since the meta-stereotype was likely to be a familiar concept to participants (as mentioned earlier), it should have been the case that making a female/male intergroup context salient and then presenting participants with a help-seeking-related vignette would be enough to make the meta-stereotype salient (rather than presenting an explicit meta-stereotype salience manipulation).²

² Although Psychologist condition participants carried out the same trait-rating task (with reference to Psychologists rather than to women), the task was only intended to promote identity salience (rather than meta-stereotype salience) in this condition. This is because the dependency-related stereotype is unrelated to the Psychologist identity. Even if carrying out the trait-rating task encouraged Psychologist condition participants to think about the differences between Psychologists and non-Psychologists, this was not predicted to promote meta-stereotype salience.

This assumption is supported by work investigating the activation of stereotype threat (e.g., Steele & Aronson, 1995). Although the aim of the present study was not to promote stereotype threat (since participants were not required to complete any tasks that measured competence or performance), the fact remains that well-established stereotypes involving psychologically-important social identities such as gender and race appear to be activated relatively easily.

It was therefore predicted that the manipulations would affect how participants conceptualised the act of seeking help. In particular, Gender condition participants were predicted to be more concerned than Psychologist condition participants about the reputation of their respective ingroups, and how seeking help had the potential to present the ingroup in a bad light. By seeking help, Gender condition participants could risk confirming (or even emphasizing) the dependency-related stereotype to a member of the group who (traditionally) espouses the stereotype, thereby threatening the ingroup's image and reputation. Participants in the Gender condition were therefore predicted to be more reluctant to seek help from the potential helper than participants in the Psychologist condition (who were not exposed to this image-related threat, because 'dependency' is not stereotypically associated with being a Psychologist).

Methods & Measures

To examine these predictions, a number of items were included in the study that were designed to investigate participants' concerns about issues such as ingroup reputation management and ingroup image concerns. These included items measuring the extent to which participants believed the potential helper was thinking about them in group-related terms and the extent to which participants felt that seeking help would damage the reputation of the ingroup. The extent to which participants felt that

the potential helper possessed positive and negative traits and was similar to themselves were also measured.

Since a sense of unfairness is deemed to be a crucial pre-requisite for salient meta-stereotypes to affect perceptions and behaviour (Hopkins et al., 2007), participants were asked to rate the extent to which they would find it unfair if they were described in dependency-related terms, and how motivated they would be to try to challenge that description. It was expected that participants in the Gender condition would be thinking about themselves as women when they responded to these items, while participants in the Psychologist condition would be thinking about themselves as Psychologists. The corollary of this was expected to be that the items would tap into the female dependency meta-stereotype in the Gender condition, and thus be rated more unfair.

As numerous social identity-related studies have highlighted the behavioural, affective and motivational differences between high and low ingroup identifiers in group-related situations (e.g., Jetten et al., 2002; Jetten, Spears, & Manstead, 1997; Nadler & Halabi, 2006), participants' level of female identification was also measured. The fact that high ingroup identifiers are most invested in the group (e.g., Ellemers et al., 1999) and most concerned about its image and reputation (e.g., Nadler & Halabi, 2006) makes identification-level a potentially important variable in the current study.

To investigate whether the experimental manipulations had any effect on mood, participants' negative affect was also measured. To examine affect with specific reference to help-seeking, participants were asked to rate the extent to which seeking help would have led to them experiencing a number of negative emotions

commonly associated with helping transactions (e.g., embarrassment, anxiety and indebtedness, Fisher, 1983; Fisher et al., 1982).

The Vignette

Although vignettes and behavioural intention measures have been used previously in both meta-stereotyping research and helping transaction research (e.g., Kamans et al., 2009; Smith & DeWine, 1991), there are clear limitations to using this method (rather than devising a situation where participants are actually able to seek help on a task). To create the strongest manipulation possible, participants were encouraged to engage with the vignette, and were referred to as ‘you’ in the text, in order to personalise the situation and make it self-relevant. Finally, the cover-story (which related to ‘women in the workplace’ in the Gender condition and ‘Psychologists in the workplace’ in the Psychologist condition, in a further attempt to increase identity salience) also helped enhance the perceived importance of the vignette’s contents, and highlight its relevancy to participants.

Method

Participants and Design

Female Scottish undergraduates studying Psychology ($N = 49$, $M_{\text{age}} = 21.27$ years, $SD = 2.43$, age range = 19-31 years) were assigned randomly to the two experimental conditions (Gender condition $N = 25$ and Psychologist condition $N = 24$), and completed the study in class as part of their course. This manipulation was achieved by presenting different cover stories in the two experimental conditions (see Appendix 2 for experimental materials).

Procedure and Measures

Participants in both conditions were presented with a booklet entitled *Career Opportunities Questionnaire*. The text on the first page of the booklet explained the aim of the study, and differed by condition. In the Gender condition, the information page explained that the experimenter was interested in women's career opportunities, and how women in business are perceived. This was described as an important topic, since many female students decide to move into the world of business after graduation, rather than remaining in academia. In the Psychologist condition, the information page explained that the experimenter was interested in Psychologists' career opportunities, and how Psychologists in business are perceived. Again, this was described as an important topic, since many Psychology students decide to move into the world of business after graduation, rather than remaining in academia. The aim of these information sheets was to make either the participants' gender identity or Psychologist identity salient, depending on condition. After reading the information sheet, participants were invited to complete the booklet.

Trait Rating

Gender condition. To increase identity salience and to create an intergroup context (which was intended to activate the dependency meta-stereotype), participants in the Gender condition were asked to indicate their sex, and then to rate the extent to which they agree that women possess a number of stereotypically masculine and feminine traits (*kind, aggressive, hostile, compassionate, argumentative, caring, forceful* and *warm*; 0 = *strongly disagree* and 4 = *strongly agree*), (Bem, 1974). The feminine traits were combined into a single scale ($M = 3.15$, $SD = 0.54$, Cronbach's $\alpha = .83$), as were the masculine traits ($M = 2.02$, $SD = 0.54$, Cronbach's $\alpha = .65$).

Psychologist condition. To increase identity salience, participants in the Psychologist condition were asked to indicate the number of years they had been

studying Psychology, and were then invited to complete the same trait rating task. However, these participants were asked to rate the extent to which they agreed that Psychologists possess each of the traits. Again, the feminine traits were combined into a single scale ($M = 2.86$, $SD = 0.54$, Cronbach's $\alpha = .78$), and so were the masculine traits ($M = 1.76$, $SD = 0.64$, Cronbach's $\alpha = .72$).

After this point in the questionnaire, participants in both conditions received identical items.

The Vignette

Participants were presented with a page-long text-based vignette and were asked to imagine themselves in the situation. The vignette referred to the participant as 'you', and it was explained that the situation took place five years from the present day. The participant was supposedly employed by an advertising agency, and had recently received a promotion. The increased workload was taking its toll, however, and the individual was struggling to cope. The vignette suggested that one way to combat this problem would be to seek help from someone in the agency. A single potential helper was described: a man named Mark Williams, who graduated from a nearby university with a Psychology degree (i.e., he was presented as being a male and a Psychologist). Mark's male identity was emphasised by mentioning he had played rugby at university, and his Psychologist identity was emphasised by mentioning he had received a good degree (a 2:1) from a relatively prestigious local university (Edinburgh).

Dependent Measure: Self-Reported Willingness to Seek Help

The study's main dependent measure consisted of four items. Participants were asked how likely they would be to disclose their concerns to Mark, to seek help from Mark, to share their worries with Mark and to seek advice from Mark (0 = *not at*

all likely and 3 = *very likely*). These items were combined to form a scale ($M = 1.63$, $SD = 0.73$, Cronbach's $\alpha = .94$).

Mark's Traits

Participants were asked to rate the extent to which they agreed that Mark possessed each of six helper-related traits (*sympathetic, threatening, helpful, understanding, judgemental* and *empathic*), (0 = *strongly disagree* and 4 = *strongly agree*). The two negative traits (*threatening* and *judgemental*) were reversed and combined with the four positive traits to form a positive trait scale, ($M = 2.45$, $SD = 0.50$, Cronbach's $\alpha = .81$).

Thought Listing

Participants listed up to five thoughts, feelings or ideas they had when contemplating whether they would have sought help from Mark. They were free to be as specific or as general as they wished.

Mark's Opinions

Using 0-3 scales (0 = *not at all* and 3 = *a lot*), participants were asked to rate the extent to which seeking help would make Mark think of them as a work colleague ($M = 2.27$, $SD = 0.64$), as a Psychologist ($M = 1.35$, $SD = 0.88$) and as a woman ($M = 2.10$, $SD = 0.80$), (e.g., *When you seek Mark's help, to what extent will he think of you as a work colleague?*).

Meta-Stereotype Confirmation

Using a single item, participants were asked to rate the extent to which seeking help from Mark would lead to confirmation of gender stereotypes (0 = *not at all* and 3 = *a lot*; $M = 1.00$, $SD = 0.98$).

Similarity and Typicality

Participants rated the extent to which they felt similar to Mark (0 = *very dissimilar* and 4 = *very similar*; $M = 2.41$, $SD = 0.79$). Participants also rated the extent to which Mark was typical of other men ($M = 2.27$, $SD = 0.67$), and typical of other Psychologists ($M = 2.18$, $SD = 0.64$), (0 = *very atypical* and 4 = *very typical*).

Affect

To measure affect levels, participants were asked to rate how they would feel if they sought Mark's help (0 = *very bad* and 4 = *very good*; $M = 1.98$, $SD = 0.97$). Participants were also asked to rate the extent to which help-seeking would affect their levels of discomfort, embarrassment, indebtedness and anxiety (0 = *not at all* and 3 = *a lot*). These four items were combined to form a help-seeking-related negative affect scale ($M = 1.19$, $SD = 0.59$, Cronbach's $\alpha = .72$).

Reputation Effects

The effect of help-seeking on reputation was measured with three items which asked participants to rate the extent to which seeking help from Mark would damage their personal reputation as a work colleague ($M = 0.55$, $SD = 0.79$), the reputation of Psychologists ($M = 0.12$, $SD = 0.33$) and the reputation of their gender group ($M = 0.43$, $SD = 0.76$), (0 = *not at all* and 3 = *a lot*).

Meta-Stereotype Confirmation Concerns

Participants were asked to rate the extent to which it would be unfair if Mark described them in terms of four stereotypically-female adjectives (*needy*, *dependent*, *submissive* and *inferior*), (0 = *very unfair* and 4 = *very fair*). These items were reversed and combined into a single scale of meta-stereotype unfairness ($M = 3.23$, $SD = 0.78$, Cronbach's $\alpha = .70$). Participants also rated the extent to which they would be inclined to challenge Mark's descriptions if he described them in each of these terms, (0 = *very disinclined* and 4 = *very inclined*). These items were combined into a

single scale of inclination to challenge the meta-stereotype ($M = 3.27$, $SD = 0.79$, Cronbach's $\alpha = .76$).

Level of Gender Identification

Finally, participants were instructed to think about themselves as a member of their gender group, and were presented with four of the seven items from the centrality sub-scale of Cameron's (2004) social identity measure (e.g., *I often think about the fact that I am a member of this group*; 0 = *strongly disagree* and 4 = *strongly agree*). The relevant items were reversed and combined with the others to form a scale ($M = 2.09$, $SD = 0.79$, Cronbach's $\alpha = .88$). After completing these final items, participants were debriefed and compensated.

Results

Manipulation Checks

Meta-Stereotype Activation

To test the prediction that participants in the Gender condition would experience more meta-stereotype activation than participants in the Psychologist condition, the results from the helping transaction-related thought-listing task were examined. Since the thought-listing task was opened-ended and unconstrained (enabling participants to write down any thoughts that came to mind regarding the act of seeking help from Mark), it was deemed to be a particularly unobtrusive way to examine the effectiveness of the experimental manipulations.

First, it was found that the mean number of comments per participant in the Gender condition (3.28 , $SD = 1.14$) was significantly higher than the mean number of comments per participant in the Psychologist condition, (2.50 , $SD = 1.35$; $t(47) = 2.19$, $p = .03$, $d = 0.62$). This suggests participants in the Gender condition appraised

and assessed the helping transaction (in general terms) to a greater extent than participants in the Psychologist condition, thereby providing tentative support for the prediction that participants in the two conditions would perceive (and respond to) the same act of help-seeking differently.

Second, to examine the nature of participants' help-seeking-related thoughts in more depth, the comments were divided into thematic categories. Using content analysis, (e.g., Neuendorf, 2002) three comment categories were created: *approach-related* (relating to a positive aspect of help-seeking or the helping transaction in general), *avoidance-related* (relating to a negative aspect), or *neutral* (items that did not fit comfortably into either of the other two categories, or were unrelated to help-seeking). Two independent coders (blind to the experimental design and hypotheses) then divided the comments into these three categories. After discussion, the coders' categorizations matched for all but two comments (98.59 % agreement, *Cohen's* $\kappa = .98$). These two comments, along with the neutral comments (six in the Gender condition and five in the Psychologist condition) were ignored, and the frequencies of the approach-related and avoidance-related comments were calculated for the two experimental conditions. Although the difference between the two conditions in terms of the ratio of approach comments to avoidance comments was non-significant, $\chi^2 (1, N = 129) = .75, p = .39$, the coders then categorized the avoidance-related comments into two further groups. These were *meta-perception related* (where the comment involved awareness or acknowledgement of how Mark might perceive the participant or their help-seeking behaviour during the helping transaction), and *non-meta-perception related* (where the comment involved a general reluctance or concern

about seeking help, but it did not relate to meta-perceptual concerns *per se*).³ After discussion, the coders agreed on 100% of their categorizations. The frequency of each type of avoidance comment was calculated for the two experimental conditions (see Table 1, row 2). A two-way Chi-square test revealed that the difference between the two conditions in terms of the ratio of meta-perception-related avoidance comments to non-meta-perception-related avoidance comments was significant, with the ratio being higher in the Gender condition (13:23) than in the Psychologist condition (4:27; $\chi^2(1, N = 67) = 4.74, p = .03$). As predicted, this result suggests that participants in the Gender condition were more aware of the image-related implications of seeking help from Mark than participants in the Psychologist condition.

Table 1.
Frequency of Avoidance comments in each condition.

Gender condition- Avoidance comments			Psychologist condition- Avoidance Comments		
36			31		
Meta-Perception		Non-meta-perception	Meta-perception		Non-meta-perception
13		23	4		27
Gender-related meta-perception	Non-gender-related meta-perception		Gender-related meta-perception	Non-gender-related meta-perception	
3	10		0	4	

However, a limitation of this comment-focussed analysis is that there was one more participant in the Gender condition ($N = 25$) than in the Psychologist condition ($N = 24$). This could mean that there were significantly more meta-perception-related

³ It was not possible to divide the approach-related comments in a similar way, because no comments were deemed to involve explicit meta-perceptual elements. This is perhaps unsurprising, since image-related thoughts regarding the act of help-seeking tend to be predominantly negative (e.g., Fisher, Nadler, & DePaulo, 1983).

avoidance comments in the Gender condition simply because there were more participants in this condition. To remedy this, a Gender condition participant (who included at least one avoidance comment in their thought-listing response) was removed from the data-file at random, and the Chi-square analysis was repeated. This removal did not affect the result: $\chi^2(1, N = 66) = 5.05, p = .03$. This procedure was repeated another four times, and the resultant p -values were always either significant ($p \leq .03$) or, in one case, marginally significant ($p = .06$).

The meta-perception-related comments were further classified as either *gender-related* or *non-gender-related* depending on whether the comments mentioned gender relations (as before, the coders agreed on 100% of their categorizations after discussion). However, this analysis did not reveal a significant difference between the conditions (there were three gender-related and 10 non-gender-related meta-perception comments in the Gender condition, and zero gender-related and four non-gender-related meta-perception comments in the Psychologist condition, see Table 1, row 3). A Fisher's Exact Test (selected because some of the expected frequencies were less than five, which is the minimum value required to meet the assumptions of a Chi-square test, Kinnear & Gray, 2004), revealed that the difference between the two conditions in terms of the ratio of gender-related to non-gender-related meta-perception comments was non-significant, ($p = .54$, two sided; $p = .42$, one-sided). This suggests that the experimental manipulations were only partially successful: although results were obtained to support the idea that Gender condition participants were more likely than Psychologist condition participants to consider the (negative) image-related implications of help-seeking, there was no evidence to suggest that these thoughts were more likely to involve gender-related concerns in the former condition.

Reflection on Social Identity

Repeated-measures *t*-tests revealed Gender condition participants indicated that women possess feminine traits to a significantly greater extent ($M = 3.15$, $SD = 0.54$) than masculine traits ($M = 2.02$, $SD = 0.54$; $t(24) = 8.64$, $p < .001$, $d = 1.73$). This suggests that participants were reflecting on the stereotypical properties of the female identity (an important process for the promotion of meta-contrast). Furthermore, Psychologist condition participants indicated that Psychologists possess feminine traits ($M = 2.86$, $SD = 0.55$) to a significantly greater extent than masculine traits ($M = 1.76$, $SD = 0.64$; $t(22) = 5.61$, $p < .001$, $d = 1.15$). Overall, these results support the idea that the experimental manipulations helped participants to differentiate between men and women in the Gender condition. Incidentally, the results also indicate that the experimental manipulations helped participants to differentiate between Psychologists and non-Psychologists in the Psychologist condition (although this latter finding is not so important for the present study, since this Psychologist/non-Psychologist comparison was not predicted to promote meta-stereotype salience, unlike the men/women comparison in the Gender condition).

Main Analyses

The between-condition means and standard deviations for the key variables can be found in Table 2. Participants' help-seeking-related affect and level of female identification did not differ significantly between the conditions and added nothing to the analyses, so will not be discussed here. The same was the case for the perceived unfairness of the meta-stereotype-related traits and participants' motivations to challenge these traits, as well as for the extent to which Mark was perceived in positive terms. A number of other variables which related to participants' perceptions of Mark (and his perceptions of them) differed marginally between the conditions (see

Table 2), but these results were weak and added nothing to the interpretation of the key results, so will not be discussed.

Table 2.

Condition means and standard deviations for major variables.

Variables	Gender Condition		Psychologist Condition	
	M	SD	M	SD
Willingness to seek help ^a	1.68	0.73	1.58	0.74
Level of gender identity ^b	1.87	1.17	2.23	0.82
Extent of Mark's positive traits ^b	2.47	0.50	2.42	0.51
Extent to which Mark sees you as Psychologist ^a	1.48	0.96	1.21	0.78
Extent to which Mark sees you as colleague ^a	2.44*	0.58	2.08*	0.65
Extent to which Mark sees you as a woman ^a	1.92	0.86	2.29	0.69
Extent to which help seeking confirms gender stereotypes ^a	0.76†	0.97	1.25†	0.94
How similar is Mark to you? ^b	2.60†	0.65	2.21†	0.88
How typical is Mark of men? ^b	2.16	0.80	2.38	0.50
How typical is Mark of Psychologists? ^b	2.28	0.74	2.08	0.50
How good do you feel seeking help from Mark? ^b	2.04	0.98	1.92	0.97
Overall help-seeking related negative affect scale ^a	1.19	0.51	1.19	0.68
Extent seeking help damages your reputation as colleague ^a	0.52	0.87	0.58	0.72
Extent seeking help damages Psychologists' reputation ^a	0.12	0.33	0.13	0.34
Extent that seeking help damages women's reputation ^a	0.48	0.92	0.38	0.58
Overall meta-stereotype unfairness ^b	3.12	0.87	3.34	0.68
Overall desire to challenge meta-stereotype ^b	3.36	0.71	3.17	0.86
Extent to which women possess (feminine) positive traits ^b	3.15***	↕	N.A.	N.A.
Extent to which women possess (masculine) negative traits ^b	2.02***		N.A.	N.A.
Extent to which Psychologists possess positive traits ^b	N.A.	N.A.	2.86***	↕
Extent to which Psychologists possess negative traits ^b	N.A.	N.A.	1.76***	

N.A. = Data not available in that condition.

^a = 0-3 scale, ^b = 0-4 scale, *** = $p < .001$, * = $p < .05$, † = $p < .10$.

↕ = significant within-groups analysis.

Willingness to Seek Help

Self-reported willingness to seek help did not differ between-condition (Gender $M = 1.68$, $SD = 0.73$, Psychologist $M = 1.58$, $SD = 0.74$; $t(47) = 0.46$, $p = .65$, $d = 0.14$). Nonetheless, analyses were carried out to investigate the possibility that the relationship between experimental condition and willingness to seek help might depend on (i.e., be moderated by) participants' perceptions of Mark. Specifically, since participants in both conditions were made aware that Mark was both a man and a Psychologist, it was possible for individual differences to exist between participants in terms of the extent to which they perceived Mark as a typical man and as a typical Psychologist. One of the central tenets of the social identity approach is that people possess multiple social identities, and that each of these can be more or less salient at any moment in time (Turner et al., 1987). Since Mark was described as belonging to both these groups (male and Psychologist), it was possible for there to be individual differences regarding the way in which participants perceived him. This, coupled with participants' own currently-salient identity, had the potential to affect participants' willingness to seek help. For instance, Gender condition participants might be less likely to seek help if they perceived the potential helper in highly masculine terms (since his potential status as a stereotyping outgroup member should be maximally salient, producing high levels of group image-related threat associated with the act of seeking help). Conversely, Gender condition participants might be *more* likely to seek help if they perceived the potential helper in highly Psychologist-related terms (since his status as a fellow ingroup member should be more strongly salient, reducing levels of group image-related threat).⁴

⁴ For interest, the *typical man* and *typical Psychologist* variables were conceptualised as being orthogonal to each other, since participants who perceived Mark as a highly typical man did not perceive him as a highly *atypical* Psychologist, ($r = .23$, $N = 49$, $p = .12$).

To investigate these possibilities, the moderating effect of the *typical Psychologist* and *typical man* variables were investigated (Baron & Kenny, 1986).⁵ These variables were found to reflect individual differences in participants' perceptions of Mark, rather than being the product of experimental manipulations: i.e., Mark was perceived as an equally typical man (Gender $M = 2.16$, $SD = 0.80$; Psychologist $M = 2.38$, $SD = 0.50$, $t(47) = -1.13$, $p = .27$, $d = -0.33$), and an equally typical Psychologist in the two conditions (Gender $M = 2.28$, $SD = 0.74$; Psychologist $M = 2.08$, $SD = 0.50$, $t(47) = 1.09$, $p = .28$, $d = 0.29$). This indicated that it was legitimate to conceptualise these variables as moderators.⁶

Although the *typical man* variable was not found to function as a moderator, the *typical Psychologist* variable was revealed to have a moderating effect on the relationship between experimental condition and willingness to seek help.

Moderation analysis. The data were found to meet the assumptions of regression analysis (see Appendix 1). After taking account of the variance explained by the standardized condition and the standardized *typical Psychologist* variables individually, the interaction between standardized condition and the standardized *typical Psychologist* variable was found to significantly predict willingness to seek help, $R^2 = .19$, $\Delta R^2 = .16$, $F(1, 45) = 8.77$, $p = .005$, indicating moderation (see Appendix 1 for more details of this procedure).

Simple slopes analysis. To examine the pattern of this interaction in more depth, simple slopes analysis was used (Preacher, Curran & Bauer, 2003): see Appendix 1 for more information. The significant interaction term was plotted at one

⁵ Moderation analysis is one of the key statistical analyses used in this thesis (along with conditional indirect effects analysis). Appendix 1 describes the logic behind these analyses, how they are carried out in SPSS and how the resulting output is interpreted.

⁶ For interest, neither variable was found to correlate with participants' level of female identification in either condition (all $ps > .15$).

standard deviation above ('high') and one standard deviation below ('low') the mean of the standardized *typical Psychologist* variable (see Figure 1). This plotting procedure revealed that the 'high' *typical Psychologist* slope was significant (*simple slope* = 0.37, *SE* = 0.15, *t* = 2.39, *p* = .02), while the 'low' slope was marginally significant (*simple slope* = -0.27, *SE* = 0.14, *t* = -1.91, *p* = .06). Willingness to seek help was therefore significantly *higher* in the Gender condition than in the Psychologist condition for participants who perceived Mark as a highly typical Psychologist, while it was marginally *lower* in the Gender condition than in the Psychologist condition for participants who perceived Mark as a less typical Psychologist.

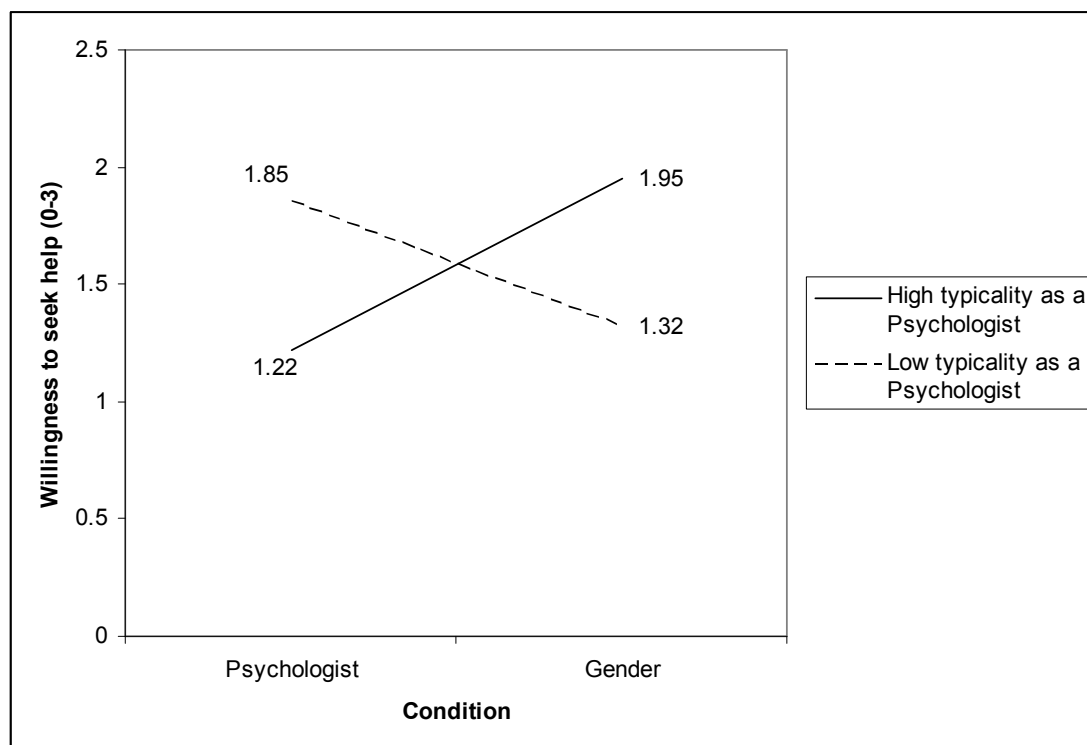


Figure 1. The moderating effect of Mark's perceived typicality as a Psychologist on the relationship between experimental condition and participants' willingness to seek help from Mark.

In order to compare participants who perceived Mark as a highly typical Psychologist with those who perceived him as a less typical Psychologist *within* each condition, the significant interaction was re-plotted (with experimental condition as the moderator variable and *typical Psychologist* as the Independent Variable). Doing this revealed that participants in the Gender condition were significantly *more* willing to seek help if they perceived Mark as a highly typical Psychologist (rather than as a less typical Psychologist; *simple slope* = .32, *SE* = .12, *t* = 2.62, *p* = .01). This suggests that focusing on Mark's Psychologist status in the Gender condition helped reduce feelings of threat associated with seeking help from him, thereby increasing participants' willingness to seek help. Interestingly, participants in the Psychologist condition were marginally *less* willing to seek help if they perceived Mark as a highly typical Psychologist (rather than as a less typical Psychologist; *simple slope* = -.32, *SE* = .18, *t* = -1.79, *p* = .08; see Figure 1). This suggests that perceiving Mark as a highly typical Psychologist was threatening in the Psychologist condition, leading to a reduction in participants' willingness to seek help.⁷

⁷ Since Field (2005) notes that outliers can have unduly large effects on regression analyses, an outlier analysis was performed after each moderation analysis in this thesis. Any cases identified as outliers (using the criteria described below) were removed, and the regression analysis was re-calculated. First, any cases with standardized residuals between two and three standard deviations from the regression line were identified (although Field notes that around five percent of any sample will fall more than two standard deviations from the mean). Three other indicators of case deviance were calculated: Cook's *D* (which should not exceed the critical value of 1 for any case), (Cook & Weisberg, 1982); Mahalanobis *D* (which, assuming three predictor variables and a critical levels of *p* < .001, should not exceed the critical value of 16.27 for any case), (Pallant, 2007); and leverage values (which should not exceed twice the average leverage value for the sample for any case: calculated as $((k+1)/N)$, where *k* is the number of predictor variables), (Hoaglin & Welsch, 1978). It should be noted that only leverage values were reported in the thesis, because leverage values, Cook's *D* values and Mahalanobis' *D* values are contingent on each other. This means that cases with high leverage values also tend to have high Cook's *D*/Mahalanobis' *D* values. Moreover, the leverage value is the most sensitive of the three, so using this value to identify outliers produces the most stringent results (Field, 2005).

It should also be remembered that Hoaglin and Welsch's criterion of twice the average leverage value for the sample is most applicable to large samples, and that in studies involving small samples (such as those included in this thesis), Stephens' (1992) more lenient criterion of three times the average leverage value of the sample is more appropriate (Fox, 2002). Furthermore, it is also the case that leverage values are based on the *outcome* variable/s in a regression analysis, rather than on the predictor variable/s, so there may be cases with large leverage values that do not always have large effects on the regression analysis (Field, 2005). In studies where removing cases with leverage values

Supporting Correlations

Additional correlations were found to support the key results from the moderation analysis. First, a strong negative correlation was found in the Gender condition between the extent to which participants felt that Mark would perceive them as Psychologists and the extent to which they felt they would have experienced negative affect had they sought help from Mark, ($r = -.43$, $N = 25$, $p = .03$). This indicates that being perceived as a Psychologist by Mark was linked with positive affect, supporting the finding that participants in the Gender condition who perceived Mark in strongly Psychologist-related terms (i.e., as a highly typical Psychologist) were more willing to seek help than those who did not. This correlation was positive (albeit non-significantly so) in the Psychologist condition ($r = .23$, $N = 24$, $p = .28$), supporting the finding from the moderation analysis that participants in the Psychologist condition who perceived Mark in strongly Psychologist-related terms (i.e., as a highly typical Psychologist) were *less* willing to seek help than those who did not. The difference between these two correlations was significant ($z = 2.28$, $p = .02$), indicating that being perceived as a Psychologist by Mark promoted feelings of threat in the Psychologist condition that were absent in the Gender condition.⁸

that exceeded Hoaglin and Welsch's criterion and repeating the moderation analysis produced a non-significant interaction, Stevens' (1992) more lenient criterion of three times the average leverage value for the sample was therefore adopted.

With these issues in mind, an outlier analysis in the present study revealed two cases had standardized residuals more than two standard deviations from the regression line, while nine other cases had leverage values that exceeded Hoaglin and Welsch's (1978) recommended criterion of twice the average leverage value for the sample. However, since removing nine cases would constitute over 18% of the data (which would undoubtedly have a large impact on power levels), Stevens' (1992) more lenient criterion of three times the average leverage value of the sample was adopted for this analysis. Two cases violated this assumption, but removing them (and the two outliers) had no impact: the interaction remained significant, $R^2 = .12$, $\Delta R^2 = .12$, $F(1, 41) = 5.33$, $p = .03$. This indicates that the outliers and the cases with the largest leverage values were not affecting the analysis unduly, so the regression can be interpreted legitimately.

⁸ Throughout this thesis, any analysis involving the comparison of the strength of two correlations was carried out with either the INDEPCOR.EXE computer program (for between-groups comparisons) or the DEPCOR.EXE computer program (for within-groups comparisons), (Crawford, 1998). The INDEPCOR program converts the two correlations into z -scores and then divides the difference

Although not addressed by the moderation analysis, correlations investigating the implications of perceiving the experimental situation in strongly *gender*-related terms were also examined. Results were obtained to support the idea that Gender condition participants who perceived the experimental context (and hence Mark) in gender-related terms tended to appraise the situation somewhat negatively.

Specifically, analysis revealed that the correlation between the extent to which participants believed that seeking help from Mark would confirm gender stereotypes and the extent to which participants perceived help-seeking as damaging the reputation of women was strongly positive in the Gender condition ($r = .79, N = 25, p < .001$), but non-existent in the Psychologist condition ($r = .06, N = 24, p = .78$). The difference between these two correlations was highly significant ($z = 3.32, p = .0009$). This supports the idea that the act of confirming gender stereotypes had particularly threatening image-related implications for participants in the Gender condition: something not experienced by participants in the Psychologist condition.

Furthermore, a strong positive correlation was obtained in the Gender condition between the extent to which participants were motivated to challenge the dependency-related stereotypical traits and the extent to which they felt that they would have experienced negative affect had they sought help from Mark, ($r = .51, N = 25, p = .01$). Again, this correlation was small (and negative) in the Psychologist condition ($r = -.14, N = 24, p = .50$). The difference between these correlations was significant ($z = 2.30, p = .02$). This suggests that participants in the Gender condition who felt strongly-motivated to show that they did not possess dependency-related

between the two values by the standard error of the difference. The DEPCOR program uses William's (1959) test, which examines the difference in size between two dependent correlations. All correlations and their comparisons are two-tailed.

traits perceived the act of seeking help from Mark in particularly negative terms: again, something not experienced by Psychologist condition participants.⁹

Discussion

Study 1 was intended to be a preliminary exploration of strategic group-related help-seeking behaviour. Through the use of a trait-rating task, participants were expected to categorize themselves as either women or as Psychologists (depending on condition). In the Gender condition, this trait-rating task was also expected to activate the well-known stereotype of female dependency (through the process of meta-contrast). The experimental manipulation in the Gender condition was thus intended to create a context in which participants would perceive the act of help-seeking as having the potential to confirm a negative dependency-related stereotype of their group: a perception not predicted to occur in the Psychologist condition. Gender condition participants were thus predicted to perceive the act of help-seeking in more negative terms than Psychologist condition participants (particularly with regards to how seeking help might affect the group's image), and were also predicted to be more unwilling to seek help.

Perceptions of Help-Seeking

⁹ Here, it should be noted that the items measuring participants' motivation to challenge the dependency-related traits asked participants to indicate how motivated they would be to challenge the traits if *they themselves* were described in that manner (rather than if women/Psychologists as a whole were described in such terms). Since it was hoped that participants would interpret this instruction with reference to their identity as an ingroup member, this means that while participants in the Gender condition should have been thinking about their motivation to challenge these traits *as women*, the Psychologist condition participants should have been thinking about their motivation to challenge these traits *as Psychologists*. Caution should therefore be applied when interpreting this correlation. Nonetheless, the fact that a strong positive relationship emerged between motivation to challenge and help-seeking-related negative affect in the Gender condition (but not in the Psychologist condition) suggests that a link between concerns for one's image and the act of help-seeking existed in the Gender condition, but did not exist in the Psychologist condition. This is entirely consistent with predictions.

There was evidence to indicate that the experimental manipulations were at least partially effective in achieving this goal: the results from the thought-listing task suggest participants in the Gender condition thought more about the helping transaction in general, and were more aware of the image-related aspects of help-seeking than participants in the Psychologist condition. However, this awareness did not appear to extend to gender-related identity concerns (a finding which would have provided stronger support for the key prediction of this study). This indicates that the manipulation in the Gender condition was not entirely successful at activating meta-stereotype-related concerns. Nonetheless, that fact that evidence was obtained to suggest that the same act of help-seeking was assessed and appraised differently in the two conditions provides some indication of manipulation efficacy (as well as providing initial evidence to support the strategic help-seeking hypothesis).

Willingness to Seek Help

Although the experimental manipulations were not found to affect participants' willingness to seek help directly, moderation analyses helped to shed light on the *types* of participants for whom the experimental manipulations promoted help-seeking reluctance. Importantly, the types of participants most affected by the manipulation were found to differ by condition. This suggests that (as expected), the manipulations affected how participants perceived themselves in social identity-related terms, and that this had implications for how they perceived the act of seeking help. The key implication of the moderation analysis was that participants' pre-existing tendencies to perceive Mark as a Psychologist took on different meanings once the manipulations affected participants' own identity salience. Specifically, perceiving Mark as a highly typical Psychologist appeared to have some kind of

protective ‘buffering’ effect in the Gender condition, while it produced feelings of help-seeking-related threat in the Psychologist condition.

Extending the results of the moderation analysis, other correlations revealed that Gender condition participants who perceived the interaction in highly *gender*-related terms were likely to be especially threatened by the prospect of confirming ingroup-related stereotypes: again, something absent in the Psychologist condition. This supports the idea that participants in the Gender condition who thought about the interaction in strongly intergroup terms would be most affected by the image-related threat of seeking help from a member of a (stereotyping) outgroup. This conclusion is also supported by the strong positive correlation between desire to challenge the dependency-related stereotypical traits and help-seeking-related negative affect in the Gender condition. Meanwhile, participants who were able to focus less on this aspect of the interaction and to consider the Psychologist-related element tended to experience a reduction in these feelings of threat.

While these findings are intriguing (and consistent with predictions), examining the Psychologist condition result from the moderation analysis suggests that the ingroup (Psychologist) threat-reduction element of the story is perhaps not as simple as this. Here, it was participants who perceived Mark as a highly typical ingroup member (Psychologist) who were *least* willing to seek his help. Since these individuals’ Psychologist identity was made salient, it is possible they spent time comparing their own status within the group to Mark’s status. Since Mark was described as an extremely able and successful ‘high-flyer’, it may be that participants who focused strongly on Mark’s Psychologist identity (as opposed to any of his other social identities) felt particularly threatened by Mark’s superior status in the group. In such cases, seeking help from an ingroup member could be perceived as a particularly

unappealing prospect, since it would risk lowering one's standing within the group even further, whilst reinforcing Mark's superiority. This highlights an important point: seeking ingroup help is not always cost-free. Since seeking help risks exposing one's incompetency and shortcomings to others (e.g., Lee, 2002), and group members (particularly highly-identifying ones) tend to be motivated to present themselves in a positive light to fellow ingroup members (e.g., Ellemers et al., 1999), it is possible to see why the prospect of seeking ingroup help could be threatening. This is perhaps most likely to be the case when the potential ingroup helper is seen to possess high levels of status, or is seen to be a highly prototypical ingroup member. In this scenario, help-seeking would highlight discrepancies between the person in need and the prototypical individual (i.e., the person who should be emulated if one wishes to be seen as a 'good' group member, e.g., Turner, 1991), which could risk the person in need being categorized as peripheral to the group (e.g., Jetten et al., 2003). To avoid highlighting such discrepancies, it makes sense for group members to avoid seeking ingroup help. The issue of ingroup help being perceived as threatening will be returned to at a later point in this thesis.

Future Directions and Improvements

The exploratory nature of the present study meant that a number of design improvements for future studies were informed by its limitations and shortcomings. Four key limitations are discussed below.

i) Activating the Meta-Stereotype

A key element of the present study was the assumption that making the well-known male/female intergroup context salient (i.e., encouraging participants to perceive themselves as women and Mark as a man in a help-seeking situation) would be sufficient to activate the female dependency meta-stereotype in the Gender

condition. Although it could be argued that this is but one of many female-related stereotypes that may become activated in such contexts (e.g., other stereotypes may involve ideas such as women being emotional, physically weak and having a poor sense of direction and limited spatial awareness), most of these stereotypes appear to have their basis in the concept of dependency, and focus on women's apparent reliance on men when carrying out tasks. This suggests that the general concept of dependency is likely to become salient when women think about the perceived differences between men and women (which participants were encouraged to do), thereby providing some vindication for the choices made regarding the study's design.

Nonetheless, the fact remains that a study involving deliberate and explicit manipulation of meta-stereotype salience (that is independent of intergroup context salience) would mean that no assumptions would have to be made regarding salient intergroup contexts activating meta-stereotypes. Furthermore, an explicit (and thus more powerful and controlled) manipulation of meta-stereotype salience would be likely to have stronger effects on participants' perceptions of help-seeking and willingness to seek help.

Such a design would also prevent an important experimental confound that features in the present study. Specifically, it is not possible to untangle the effects of the salient meta-stereotype from the effects of the salient intergroup context on participants' responses in the Gender condition. This is because meta-stereotype salience was predicted to be a consequence of the salient intergroup context, meaning that the independent effects of these two elements cannot be teased apart. This makes it difficult to draw conclusions regarding the specific effects of salient meta-stereotypes on participants' responses to helping transactions (the key aim of this thesis).

With these issues in mind, future studies in this thesis involve explicit manipulations of meta-stereotype salience. Moreover, these manipulations take place independently of intergroup context salience. By being clearer about what is being manipulated, and by being able to differentiate the effects of salient meta-stereotypes from the effects of salient intergroup contexts, forthcoming studies are designed in a manner which enables stronger (and more valid) results to be obtained.

ii) The Relevance of the Meta-Stereotype to the Salient Identity

As well as the lack of an explicitly (and independently) salient meta-stereotype, the present study featured an additional experimental confound. Depending on condition, two very different identities were expected to become salient for participants (female or Psychologist). This meant the dependency-related meta-stereotype was only relevant for the female identity, not for the Psychologist identity (i.e., women are sometimes stereotyped as dependent, but Psychologists are not generally stereotyped in such terms). This was a deliberate feature of the design, since it meant that Psychologist condition participants would not experience the same level of help-seeking-related threat as Gender condition participants. An experiment designed to remedy this confound would involve making participants' female identity salient in both conditions, and manipulating meta-stereotype salience between-condition (a design improvement which also speaks to the issue of the non-independence of the meta-stereotype manipulation discussed above). Future studies in this thesis are designed in this manner.

iii) Measuring Participants' Level of Identification

Related to the previous point, it would have been useful to measure participants' level of Psychologist identification, rather than simply measuring their level of female identification. Although participants' female identification was not

found to interact with the extent to which they perceived Mark as a typical man or as a typical Psychologist, it would have been interesting to examine the role (if any) of their level of Psychologist identification. Furthermore, since the (undergraduate) participants might not have considered themselves fully-fledged Psychologists (which could have affected the extent to which they identified as Psychologists), it might also have been useful to examine the extent to which they felt they would have identified with the Psychologist identity after graduating (i.e., at the time-period in which the vignette was set). For instance, perhaps participants who felt they would identify especially highly as Psychologists in the future were those who were more inclined to perceive Mark as a typical Psychologist during the study.

iv) More General Limitations

In more general terms, the present study was limited by its small scale and lack of behavioural measures. It can be understandably difficult for participants to engage with brief vignettes (especially those describing a point in the relatively distant future), and it is almost certain that this affected participants' responses to the questionnaire items. Furthermore, there is evidence to suggest that people's behavioural intentions often bear little resemblance to their actual behaviour (e.g., La Pierre, 1934), which is a major limitation of using non-behavioural measures (especially for help-seeking, which usually involves high levels of personal activity and initiative). Future studies in this thesis thus benefit from the utilization of behavioural measures and 'real-world' (albeit laboratory-based) tasks upon which participants can seek help (an ethos in-keeping with much of the earlier helping transaction research, e.g., Latané and Darley, 1970).

Conclusions

In conclusion, the results from the present study suggest that it is possible to frame the same helping transaction in different ways depending on the nature of the social context. Moreover, evidence was obtained to suggest that this framing has important implications for the extent to which participants consider the image-related implications of seeking help, and for their willingness to actually seek help.

Participants who perceived Mark as a highly typical Psychologist in the Gender condition were thus more willing to seek help than those who saw him as a less typical Psychologist, perhaps because perceiving Mark in these terms helped to reduce the image-related threat of help-seeking. On the other hand, participants who perceived Mark as a highly typical Psychologist in the Psychologist condition were particularly *unwilling* to seek help, perhaps because seeking help from a highly-successful ingroup member had the potential to threaten their position in the group. While this issue of intragroup-related threat will be returned to at a later stage, it is the intergroup aspect of the present study which is of key importance for this thesis. Attempts will therefore be made in the next two studies to investigate the concept of intergroup strategic help-seeking in more depth, using improved designs and behavioural measures.

Chapter 8

Study 2: A behavioural investigation of strategic help-seeking in the context of a salient meta-stereotype.

Study 1 provided a useful exploration of the concepts and issues surrounding the idea of strategic receiving, and revealed a moderating effect of the extent to which the potential helper was perceived as a typical Psychologist on the relationship between experimental condition and willingness to seek help. However, Study 1 was limited by the nature of its design, its lack of behavioural measures and the use of a vignette. Study 2 was thus an attempt to remedy some of these problems and limitations, with the aim of investigating whether the fear of confirming a negative meta-stereotype has the potential to affect participants' actual help-seeking behaviour.

Design and Predictions

To enable this investigation, a three-condition independent-groups experimental design was used. This meant that the way in which participants perceived and related to the potential help-givers could be manipulated, and the implications of this for participants' help-seeking behaviour could be investigated. In all conditions, female participants were presented with a difficult task, and had to decide whether to seek help on the task from a group of males. However, the nature of the design meant that participants' perceptions of the act of help-seeking (and thus the extent to which they would engage in help-seeking) were predicted to be a function of the experimental manipulations in the three conditions.

Control Condition (Interpersonal)

First, in order to obtain a measure of participants' help-seeking (and feelings towards the act of help-seeking) in a context which lacked any group-related identity

concerns, a control condition was devised. Participants in the control condition were encouraged to think of themselves as unique individuals within the experimental situation (rather than as members of their gender group). Participants were therefore encouraged to think about the potential helpers in interpersonal terms, without considering their relationships with any social groups. This meant that the control condition (hereafter known as the Interpersonal condition) lacked a salient intergroup context, and thus lacked a salient meta-stereotype (since for a meta-stereotype to become salient, individuals must categorise themselves as ingroup and categorize the source of the stereotype as outgroup, e.g., Vorauer et al., 1998).

Experimental Condition (Meta-Stereotype Salient)

Participants in the experimental condition were expected to perceive the situation rather differently. In this condition (hereafter known as the Meta-Stereotype Salient condition), participants' gender identity *was* made salient and they were also encouraged to consider the idea that men perceive women as dependent (i.e., the meta-stereotype was made salient). This was achieved by participants rating the extent to which men perceived women as possessing a number of dependency-related traits, and then repeating this exercise to indicate the extent to which *they themselves* perceive women as possessing these traits.¹ After this, participants were presented with the task upon which they could seek help from the group of males. In this context, participants were expected to categorize the male helpers as members of the

¹ This method is essentially a subtle way to encourage participants to think about the meta-stereotype by asking them to compare the extent to which men perceive women in dependency-related terms with the extent to which they themselves perceive women in dependency-related terms. It was hoped that this task would achieve two aims. First, that it would make the meta-stereotype salient, by encouraging participants to conclude that men perceive women as more dependent than they themselves do (indeed, this would be an indication that participants perceived the stereotype as an inaccurate or unfair depiction of women). Second, it is the case that a meta-stereotype (even a well-established one) is unlikely to encourage ingroup members to behave strategically if they do not believe the outgroup actually perceives the ingroup in such terms. The trait-rating method allows for perceptions of outgroup stereotype endorsement to be tested (again by comparing the extent to which participants believe that men perceive women as dependent with the extent to which they themselves endorse such perceptions).

outgroup that endorsed the dependency-related stereotype of women. These participants were therefore predicted to be particularly concerned about confirming the dependency-related meta-stereotype through their help-seeking behaviour, and so were expected to seek lower levels of help than participants in the Interpersonal condition.

One problem with interpreting the results from the Meta-Stereotype Salient and Interpersonal conditions in this manner relates to the observation (mentioned above) that meta-stereotypes, by their very nature, involve a salient intergroup context (e.g., Vorauer et al., 1998). This means that the Meta-Stereotype Salient condition featured both a salient meta-stereotype *and* a salient intergroup context. If it was indeed found that help-seeking was lower in the Meta-Stereotype Salient condition than in the Interpersonal condition, it would therefore not be possible to isolate the unique effects of the salient meta-stereotype on participants' help-seeking behaviour from the effect of the salient intergroup context. This is a potential concern, since social identity theorists would suggest that an intergroup context (even in the absence of a salient meta-stereotype) has the potential to activate ingroup members' group-related image concerns (see Chapters 5 and 6). Such concerns may have the potential to make participants reluctant to seek outgroup help (since doing so would have the potential to highlight the ingroup's inferiority and dependence to the outgroup). In light of such observations, it is particularly important to be able to untangle the effects of a salient meta-stereotype on help-seeking (the key issue of interest in this thesis) from the effects of a salient intergroup context on help-seeking.

Intergroup Condition

For this reason, a third (Intergroup) condition was also included in the design of the present study. In this condition, participants' gender identity was made salient

(thus creating a salient intergroup context where participants would perceive the male helpers as outgroup), but no meta-stereotype was made salient (i.e., participants were encouraged to think about themselves as women, but not to think about how women are perceived and stereotyped by men). Consistent with the idea that a salient intergroup context could foster concerns that would make ingroup members generally reluctant to seek outgroup help (see above), it was predicted that help-seeking would be lower in the Intergroup condition than in the Interpersonal condition. This is because the former involved a salient intergroup context, while the latter did not.

More importantly, by comparing the Intergroup condition with the Meta-Stereotype Salient condition, the separate effects of a salient intergroup context and of a salient meta-stereotype on help-seeking can start to be untangled. It was predicted that participants in the Meta-Stereotype Salient condition would seek lower levels of help than participants in the Intergroup condition. This is because participants in the Meta-Stereotype Salient condition were not only likely to experience the threat inherent in an intergroup helping transaction: they were also likely to fear that their behaviour might confirm a negative stereotype held about their group (see Chapter 6). This additional aspect of threat should thus encourage even lower levels of help-seeking than those observed in the Intergroup condition, but this time the reduction should be related to a specific strategic element: the desire to use one's help-seeking behaviour to attempt to challenge a negative meta-stereotype held about one's group.

Mediation analyses. It was expected that mediation analyses would help shed light on the nature of this stereotype-challenging process, and how it impacts upon help-seeking behaviour. Although a number of potential mediator variables were measured, examination of the meta-stereotyping literature suggested that the extent to which the meta-stereotype was perceived as unfair was likely to have important

effects on participants' behaviour (see Hopkins et al., 2007). Specifically, the extent to which participants would find it unfair if someone described them in dependency-related terms was measured. This wording was deliberately ambiguous (i.e., the phrase *how unfair would it be if someone described you as...* was used, rather than *how unfair would it be if someone described your group as...*). It was believed that participants in the Intergroup and Meta-Stereotype Salient conditions would be thinking about themselves as members of their gender group when they answered these unfairness-related items, while participants in the Interpersonal condition would be thinking about themselves as individuals. Moreover, the fact that both an intergroup context and a meta-stereotype were salient should have meant that participants in the Meta-Stereotype Salient condition would dwell on the meta-stereotype (and their feelings towards it) to a greater extent than participants in the other two conditions. These Meta-Stereotype Salient participants were therefore predicted to rate the meta-stereotype as being more unfair than participants in the Interpersonal or Intergroup conditions. In turn, these feelings of unfairness were predicted to promote low levels of help-seeking.²

Design caveat. There is an important caveat to the argument that comparing the Intergroup and Meta-Stereotype Salient conditions will enable the effects of the salient meta-stereotype on help-seeking in the latter condition to be isolated. Specifically, it is unlikely that any intergroup context is ever entirely meta-stereotype free (indeed, the logic of Study 1 depended on the assumption that, in some cases,

² Incidentally, another advantage of wording the meta-stereotype trait unfairness items this way (i.e., the extent to which participants felt it would be unfair if *they themselves* were described in dependency-related terms) is that it provides a measure of the extent to which participants feel *personally* stereotyped. Kamans et al. (2009) found that salient meta-stereotypes are only likely to translate into compensatory behaviour when ingroup members believe themselves to be personally stereotyped by the outgroup, so it is particularly suitable to investigate meta-stereotype unfairness in this manner.

‘purely’ intergroup contexts alone, i.e., in the absence of an explicitly salient meta-stereotype, could promote meta-stereotype awareness). As soon as an ingroup member becomes aware of the existence and presence of members of a relevant outgroup, it is entirely possible that the ingroup member might consider how that outgroup thinks about the ingroup, and what the implications of those perceptions might be for the ingroup’s image. Nonetheless, it is likely that an intergroup context incorporating an explicitly salient meta-stereotype would be more successful at creating meta-stereotype salience than an intergroup context without an explicitly salient meta-stereotype.

Improving on Study 1

The design of the present study improves on Study 1 by addressing four key issues. These will be discussed briefly in turn.

i) Use of Behavioural Measures

While Study 1 only involved measuring participants’ self-reported willingness to seek help in the context of a vignette, the present study involves measuring participants’ actual help-seeking behaviour on a real task. The advantages of this design-change are clear: participants should be more engaged, involved and motivated, and any help-seeking issues they may experience will be directly relevant to them (instead of a character in a vignette). Moving from a ‘willingness to seek help’ measure to a behavioural measure of help-seeking also avoids the problem of the (often large) discrepancy between people’s intentions and actions, and allows participants to immerse themselves in the situation to a greater degree (which is particularly important in studies related to the very active process of seeking help). As noted earlier, a key aim of this thesis is to carry out research in the style and spirit of the rather elaborate field-studies incorporated into much of the previous helping-

transaction research (e.g., Hopkins et al., 2007; Latané & Darley, 1970; Levine et al., 2005), and including behavioural measures in the present study is in-keeping with this tradition.

ii) Explicit Meta-Stereotype Manipulation

The fact that the present study involves an explicit meta-stereotype manipulation is a key improvement on Study 1 in two ways. First, the logic of Study 1 involved the assumption that making a gender-related intergroup context salient automatically activates a dependency-related meta-stereotype in a helping transaction situation. No such assumption was made in the present study, highlighting the fact that the present study possesses a stronger design than Study 1. Second, an explicit meta-stereotype manipulation is also likely to increase the effect that the meta-stereotype has on participants' help-seeking behaviour (and their perceptions of the act of seeking help). This observation again highlights the increased strength of the present study's design.

iii) Introduction of the Intergroup Condition

Closely related to the explicit manipulation of the meta-stereotype is the introduction of the Intergroup context in the present study. Specifically, this means that the effects of the explicit meta-stereotype manipulation on help-seeking in the Meta-Stereotype Salient condition can start to be untangled and isolated from the effects of the salient intergroup context. The introduction of this condition thus represents an important design improvement, which should allow stronger conclusions to be drawn in the present study.

iv) Nature of the Control Condition

In Study 1, the control condition (i.e., the Psychologist condition) involved making an identity salient that was unrelated to the dependency stereotype (i.e.,

participants' Psychologist identity). This was expected to prevent the feelings of help-seeking reluctance that were predicted to be experienced by participants in the experimental (Gender) condition (a context in which the dependency-related stereotype was relevant). However, this logic led to a potentially problematic confound, where participants in the Gender condition experienced the salience of an identity that was meta-stereotype-relevant (female), and categorised the potential helper as an *outgroup* member (a male). Meanwhile, participants in the control condition experienced the salience of an identity that was meta-stereotype irrelevant (Psychologist) and categorised the potential helper as an *ingroup* member (fellow Psychologist). The nature of the control condition in the present study (i.e., the Interpersonal condition) prevents this confound, since the interpersonal comparative context means that the meta-stereotype should not be relevant (or even made salient) to participants, and the potential helpers should not be conceptualised as either ingroup or outgroup.

Methodological Issues

Design

Due to the more complex nature of the present study compared to Study 1, a two-study cover story was used. Participants were told they were participating in two unrelated studies (which were actually connected), with 'Study 1' containing the manipulations and 'Study 2' containing the measures. This design was used to reduce participants' suspicions about the study, and to make the link between the experimental manipulations and the anagram-solving task (which enabled participants' help-seeking to be measured) less obvious. This should also have helped prevent demand characteristics, and should have encouraged participants to answer the items in a more 'natural' manner.

Ethics

Consistent with British Psychological Society Ethical Guidelines (BPS, 2009), all participants were fully debriefed at the end of the study, and the reasons for the deception were made clear (as was the policy with all studies in this thesis). After the debriefing, participants were given the chance to withdraw their data from the study (without penalty), and were given the experimenter's contact details in case they had any further questions at a later point.

The Task

The present study departed from the vignette design of Study 1, and instead required participants to engage in a genuine problem-solving task, on which they were able to request help. Participants were asked to solve anagrams (jumbled-up words); a task which has been used successfully in previous help-seeking studies (e.g., Nadler, 1986, 1987) and is not generally perceived in gendered terms (unlike mathematical or logic-based tasks, for instance). Using a 'gendered task' could create two problems. First, a task on which women are (stereotypically) known to perform poorly could invoke stereotype threat (e.g., Steele & Aronson, 1995), something the present research was not intended to investigate (since the focus was on participants' strategic help-seeking decisions, not their actual task-related performance). Indeed, it could be the case that in situations that foster stereotype threat, the cognitive disruption experienced by participants leads them to *expect* to perform badly on the task from the outset, which might encourage them to give up easily, and to therefore seek help without considering the image-related implications (e.g., Desert, Croizet, & Leyens, 2002; Steele, 1997). This situation would not be suitable for the present study.

Second, authors have noted that when no specific social identity is made salient (as in the Interpersonal condition in the present study), it may be the case that

individuals select the social identity most relevant to the task with which they are currently engaged (Yopyk & Prentice, 2005). Selecting a stereotypically ‘masculine’ or ‘feminine’ task could therefore encourage participants in the Interpersonal condition to act in terms of their female social identity, thereby making it difficult to interpret the results obtained from this condition. This finding again reinforces the importance of selecting a suitably ‘gender-neutral’ task.³

Measuring Help-Seeking

The use of a real task and behavioural measures also meant that help-seeking could be measured in greater detail than in Study 1. Since participants were presented with 10 anagrams, there were potentially 10 items upon which they could seek help. Help-seeking was measured for each individual item, and then summed to obtain an overall score. Additionally, participants were able to seek different amounts of help, rather than just having the choice of ‘help’ or ‘no help’, which are participants’ only two options in many help-seeking studies (e.g., Nadler, 1987; Nadler & Porat, 1978; Shapiro, 1980). Instead, participants were able to choose from four ‘levels’ of help for each anagram: *none*, a *small hint*, a *large hint* and a *full answer*. For ease of analysis, it was expected that these four ‘levels’ of help-seeking would be transformed into a simpler measure more akin to the binary help-seeking measures that featured in Nadler and colleagues’ work. Nonetheless, it was thought likely that decisions regarding this transformation process (i.e., how to define ‘help-seeking’ and ‘non-

³ A noticeable difference between Study 1 and the present study is the type of problem that the participant (or the participant as a character in a vignette) would be seeking help for. Participants in Study 1 were asked to imagine themselves experiencing stress and workload problems, and deciding whether they would seek help to alleviate their difficulties. Meanwhile, participants in the present study decided whether or not to seek help on a difficult anagram-solving task. Although these problems are very different, they both involve (female) participants admitting to a (male) helper that they are unable to cope with a problem on their own, and need some form of assistance to solve it. This means that seeking help for either of the problems has the potential to confirm the meta-stereotype of dependency. It is the perception that the act of help-seeking is believed to create in the eyes of the helper, rather than the nature of the problem for which help is sought, which is the crucial element in these studies.

help-seeking') would be based on elements such as the actual distribution of the help-seeking data, and how participants might have experienced the act of help-seeking in that particular context. The advantage of using a multi-level 'fine-grained' help-seeking measure is that such decisions can be made by the researcher in a reflexive manner (after the participants have experienced the helping transaction), and can be based on an inspection of the distribution of the helping data (e.g., to avoid floor/ceiling effects).

Method

Participants and Design

Female undergraduates ($N = 87$) were assigned randomly to the three between-groups experimental conditions (Interpersonal condition $N = 32$, Intergroup condition $N = 26$ and Meta-Stereotype Salient condition $N = 29$). A two-study cover story was used to achieve this without participants becoming aware of the study's true purpose. 'Study 1' contained the experimental manipulations, while 'Study 2' contained the measures.

One participant explained she was dyslexic, and it was feared that this might affect her help-seeking behaviour on the anagram task. She was therefore removed from the analysis. Similarly, nine participants described themselves as non-native speakers of English, so they were removed from the analysis for the same reason. Finally, five participants expressed hypothesis-related suspicions regarding the true purpose of the experiment (i.e., they mentioned a link between gender and help-seeking during the debriefing), and were thus also removed from the analysis (three in the Meta-Stereotype Salient condition and two in the Intergroup condition). This left a total of 72 participants (Interpersonal condition $N = 26$, Intergroup condition $N = 22$

and Meta-Stereotype Salient condition $N = 24$; $M_{\text{age}} = 23.58$ years, $SD = 8.22$, age range = 18-56 years). Participants were recruited via email and posters, and participated for either a small monetary payment or partial course credit.

Procedure and Measures

Manipulations ('Study 1')

Participants were tested individually in a laboratory. To limit participants' suspicions as to why only women were recruited, it was explained casually that a large number of men had already participated, and now the experimenter's aim was to collect data from women.

Participants were told about the first study, which was initially presented as the only study in which they would participate. The real purpose of this study was to manipulate the identity salience experienced by the participants (depending on condition). In the Interpersonal condition, participants were told the study investigated the factors enhancing recall of traits used to describe people (thereby creating an interpersonal context). In the Meta-Stereotype Salient and Intergroup conditions, participants were told that the study investigated factors enhancing recall of male- and female-related traits (thereby creating an intergroup context). In addition, Meta-Stereotype Salient condition participants received a meta-stereotype prime (i.e., they were asked to consider how men viewed women).

These manipulations were delivered in two ways (see Appendix 3 for experimental materials). First, participants in the Meta-Stereotype Salient and Intergroup conditions indicated their agreement (0 = *strongly disagree* and 5 = *strongly agree*) with each of the seven items from the Centrality subscale of Cameron's (2004) social identity measure (see Study 1). The items were combined to form a pre-manipulation level of identification scale ($M = 3.12$, $SD = 0.87$,

Cronbach's $\alpha = .84$). Participants in the Interpersonal condition did not receive these items.

Second, participants in all conditions received a list of 10 trait adjectives, (pre-piloted). Four represented the 'dependent' meta-stereotype (*needy, dependent, submissive* and *inferior*), while six others were gender-neutral fillers (*likeable, inefficient, conceited, secretive, conventional* and *unsystematic*), which were not included in any analyses.⁴

Interpersonal condition participants rated the extent to which they themselves possessed each of these 10 traits (0 = *not at all* and 5 = *very much*). The dependency-related items were combined to form a scale ($M = 2.18$, $SD = 0.82$, *Cronbach's* $\alpha = .59$). In the Intergroup and Meta-Stereotype-Salient conditions, participants rated the extent to which each trait belonged to the group auto-stereotype (i.e., the extent to which they believed women possessed these traits), and the dependency items were used to form a scale (overall $M = 1.95$, $SD = 0.71$, *Cronbach's* $\alpha = .51$). Before doing this, participants in the Meta-Stereotype Salient condition also rated the extent to which each trait belonged to the meta-stereotype (i.e., the extent to which they believed men perceived women in terms of these traits), and the dependency items were used to form a scale ($M = 2.30$, $SD = 0.76$, *Cronbach's* $\alpha = .62$). This method was adapted from Hopkins et al. (2007). It should be noted that although these alphas are low, this is less important than it appears: completion of these items constituted the manipulations.

Measures ('Study 2')

⁴ These filler items were selected from a pilot study involving female undergraduates ($N = 49$). Pilot participants were presented with the 'neutral traits' sub-scale from Bem's (1974) Sex Role Inventory, and were asked to rate each trait on a 1-5 scale (1 = *Mostly/only men possess this trait* and 5 = *Mostly/only women possess this trait*). The traits rated as non-significantly different from the mid-point value (*men and women possess this trait equally*) were considered 'gender-neutral', and were selected for inclusion in the present study.

After completing the first study, participants were informed there would be a 15-minute break before the trait recall exercise. To make good use of the break, participants were invited to take part in an apparently unrelated study being carried out by the Social Psychology Research Group (an ostensible group within the university). In reality, this was the second part of the main study, which enabled variables to be measured after the experimental manipulations had occurred.

Participants were shown a large poster on the wall of the testing room, which apparently depicted the aforementioned researchers. The poster included photographs of three men, each of around 23-25 years of age, along with their first names, and the title “The Social Psychology Research Group”. The role of these photographs was to increase the believability of the cover-story and to emphasise that the researchers were male.⁵

Anagram task. It was explained that the male researchers were investigating strategies used to develop anagram-solving skills. To increase participants’ motivation to complete the task, they were told that improvements in anagram-solving skills have been linked to enhanced IQ levels and examination results. To allow participants to believe that seeking help during the study was not necessarily to be frowned upon, it was explained that strategies such as solving anagrams on one’s own or seeking help on anagrams were both useful and legitimate methods for improving skills.

⁵ The three photographs included on the poster were selected from a group of six photographs, through a pilot study involving female undergraduates ($N = 10$). Pilot participants were asked to rate each man for friendliness, attractiveness, intimidation, intelligence, and how much they would like to ask him for help on university work (0 = *not at all* and 4 = *a very large amount*). To avoid a ceiling effect on help-seeking, the men perceived as most friendly, most intelligent, and those from whom participants claimed they would be happiest to seek help were not selected for the main study. Overall, pilot participants indicated they would be moderately likely to accept help from the three selected men ($M = 2.17$, $SD = 0.48$). The photographs were also selected deliberately to involve some men who were rated as being attractive, and others who were rated as being less attractive, since Nadler (1980) found that participants were less likely to accept help from attractive people. However, it should be noted that participants believed they were receiving help from the group as a whole, so no individual man was singled out at any point during the study.

Participants were then given two minutes to try to solve 10 anagrams.⁶

Consultation form. After two minutes, participants were given a consultation form, again ostensibly written by the male researchers. Participants were told they could use this form to request as much or as little help as they desired from the male researchers. Participants indicated how much help they wished to receive on each anagram (the key Dependent Variable). For each anagram, participants could choose from one of four levels of assistance (*none, a small hint, a large hint and a full answer*). Participants were told that once they had requested help they would have more time to work on the anagrams while the form was taken to the male researchers. Participants were asked to enter their details on the front cover of the form before completing it.

Meta-Stereotype Salient and Intergroup condition participants included their initials, date of birth and sex. Participants in these two conditions therefore knew that the ostensible male researchers were aware that the help was being given to women. This was important; Hopkins et al. (2007) noted that strategic behaviour occurs when individuals are aware that a member of the relevant outgroup (who has knowledge of the intergroup dynamic) is observing their actions. To avoid creating an intergroup context, participants in the Interpersonal condition included their initials and date of birth, but not their sex.

Additional items. Participants then completed items intended to measure potential mediating and moderating variables. These were identical in all conditions.

Four items assessed participants' anagram-solving abilities and the importance they attributed to such skills (e.g., *In your opinion, how good are your puzzle-solving*

⁶ The anagrams were selected through a pilot-study involving post-graduates ($N = 7$). The 10 anagrams selected on the basis of this study involved some deemed to be either *very easy* or *easy* to solve (to avoid a ceiling effect on help-seeking) and some deemed to be either *very hard* or *hard* to solve (to avoid a floor effect on help-seeking). The selected anagrams were *brown, glockenspiel, honey, nightingale, carnation, puppy, cauliflower, zirconium, screwdriver* and *restaurant*.

skills?; 0 = *poor* and 3 = *excellent*). When these items were combined into a puzzle-solving skills scale, a reliability analysis indicated that the scale violated assumptions because of the negative covariance among the items. When one item (*How often do you attempt puzzles?*) was removed, the covariance became positive (although the alpha value was low), so the remaining three items were combined to form the puzzle-solving skills scale ($M = 1.39$, $SD = 0.50$, *Cronbach's* $\alpha = .52$).

To measure perceived meta-stereotype trait unfairness, participants were presented with three of the female-dependency traits (*needy*, *dependent* and *submissive*), along with three (positive) filler traits (*tactful*, *reliable* and *friendly*), which were not included in any analyses. Participants rated how unfair it would be if they themselves were described in terms of each of these traits (0 = *very unfair* and 4 = *very fair*), which were reversed so high values indicated high perceived unfairness. The dependency-related items were combined to form a meta-stereotype unfairness scale ($M = 2.41$, $SD = 0.74$, *Cronbach's* $\alpha = .62$).

Four items analysed participants' attitudes towards the dependency meta-stereotype (e.g., *As a woman, I feel the way that men perceive women is unjustified*). Although the dependency meta-stereotype was not specifically mentioned, it was hoped that the previous questions and manipulations would make participants think about the concept of dependency when answering these items (especially in the Meta-Stereotype Salient condition). Participants rated their agreement with each item (0 = *disagree strongly* and 4 = *agree strongly*), and these were combined to form a negative reactions scale ($M = 2.08$, $SD = 0.60$, *Cronbach's* $\alpha = .72$).

To measure level of ingroup identification, all participants then rated their agreement with the same seven Centrality items that participants in the Meta-Stereotype Salient and Intergroup conditions answered in the trait-recall portion of the

study (0 = *disagree strongly* and 4 = *agree strongly*). The relevant items were reversed and combined with the others to form a (post-manipulation) level of identification scale, ($M = 2.41$, $SD = 0.75$, *Cronbach's* $\alpha = .85$).

Participants' endorsement of benevolent sexism (or the extent to which they agree that women should be looked after and cared for by men, e.g., Barreto & Ellemers, 2005; Viki et al., 2003), was also be measured. Women vary in the degree to which they endorse benevolent sexism (Forbes, Adams-Curtis, White, & Holmgren, 2003), and this variation may account, at least in part, for their attitudes towards the dependent meta-stereotype in the present study. Participants indicated their attitudes towards benevolent sexism by rating their agreement (0 = *disagree strongly* and 4 = *agree strongly*) with four items adapted from Viki et al.'s (2003) Paternalistic Chivalry Scale (e.g., *I would expect a man I was out with to pay for my meal for me*). These items were combined to form a benevolent sexism endorsement scale ($M = 1.95$, $SD = 0.63$, *Cronbach's* $\alpha = .61$).

To measure mood, participants rated their current affect using four 0-4 bipolar scales: *bad-good*, *unpleasant-pleasant*, *tense-relaxed* and *angry-calm*, which were combined to form a positive affect scale ($M = 2.17$, $SD = 0.55$, *Cronbach's* $\alpha = .74$).

Finally, to maintain the cover-story, participants received a 'recall sheet'. Participants were encouraged to take a few moments to recall and write down the first traits that came to mind from 'Study 1', and then to answer the rest of the questions on the recall sheet. These included a suspicion check, where participants were asked whether they had any concerns that the two studies were connected (and what that connection might be), and a measure of male meta-stereotype endorsement, where participants rated the extent to which they thought that the male research group endorsed the female-dependency stereotype (0 = *not at all* and 4 = *a very large*

amount; $M = 1.38$, $SD = 1.02$). After these final items, participants were debriefed and compensated.

Results

Meta-Stereotype Endorsement vs. Auto-Stereotype Endorsement

To examine the effectiveness of the experimental manipulations, participants' trait-rating data were considered. Meta-Stereotype Salient condition participants indicated that men perceived women as significantly more dependent⁷ ($M = 3.00$, $SD = 0.76$) than they themselves did ($M = 1.79$, $SD = 0.67$; $t(23) = 6.24$, $p < 0.001$, $d = 1.28$).⁸ Although the scale alphas were low, the fact that such a clear difference was obtained in terms of how women perceived themselves and how they believed men perceived women is striking, and confirms the existence of the belief that (some) men endorse an image of women that women themselves dispute. The individual means for each of the dependency-related traits can be seen in Tables 3 and 4.

Table 3.
The means and standard deviations for each of the dependency-related traits, examined within the Meta-Stereotype Salient condition.

Traits (all 0-5 scales)	Meta-Stereotype Salient Condition			
	How much men agree traits apply to women.		How much participants agree traits apply to women.	
	M	SD	M	SD
Dependent	3.17	1.17	2.71	1.16
Submissive	2.22	1.24	1.26	0.86
Inferior	2.88	1.12	0.83	1.37
Needy	3.67	0.96	2.33	0.87
Overall	3.00***	0.76	1.79***	0.67

*** = $p < .001$

⁷ *Dependent* refers to the combined value of all four dependency-related traits, not just the single *dependent* trait.

⁸ All analyses in this thesis are two-tailed, unless otherwise stated.

Table 4.

The means and standard deviations for each of the dependency-related traits, examined between the three conditions.

Traits (all 0-5 scales)	M-S Condition How much participants agree traits apply to women.		Intergroup Condition How much participants agree traits apply to women.		Interpersonal Condition How much participants agree traits apply to self.	
	M	SD	M	SD	M	SD
Dependent	2.71	1.16	3.32	1.21	2.81	1.17
Submissive	1.26	0.86	2.00	1.16	2.31	1.12
Inferior	0.83	1.37	0.77	1.15	1.96	1.34
Needy	2.33	0.87	2.41	1.01	1.65	1.23
<u>Overall</u>	1.79	0.67	2.13	0.73	2.18	0.82

Preliminary Analyses

Percentage of Anagrams Unanswered

A one-way ANOVA revealed that the percentage of anagrams left unanswered did not differ significantly by condition, (Interpersonal $M = 77.31$, $SD = 10.79$, Intergroup $M = 75.45$, $SD = 6.71$, Meta-Stereotype Salient $M = 73.75$, $SD = 11.73$; $F(2, 69) = 0.78$, $p = .46$, $\eta^2 = .02$). This suggests that any between-condition differences in help-seeking were due to the experimental manipulations, rather than participants in one condition finding the task more difficult.

Help-Seeking

Defining 'help seeking'. As mentioned previously, help-seeking is usually measured in a binary manner in the experimental literature, with participants either choosing 'help' or 'no help' (e.g., Nadler, 1987). By incorporating multiple levels of potential help into the present study, the decision regarding what constitutes 'help-seeking' becomes somewhat more complex. However (as mentioned previously), just because four levels of help-seeking were measured in the present study does not mean

that a four-point scale should be used when analysing participants' help-seeking behaviour: it is highly likely that the scale was not interval in nature, and that the spaces between some points on the scale were larger (psychologically speaking) than others. With this in mind, the data were examined before deciding how to define 'help-seeking'. As mentioned earlier, this enabled the decision to be based on participants' actual behaviour (rather than on a simple help/no-help dichotomy decided upon before help-seeking took place). This examination of the data also meant that floor/ceiling effects could be avoided.

Table 5 shows the mean percentages of *no help*, *small hints*, *large hints* and *full answers* participants sought on anagrams they were unable to answer (see the *Calculating 'help seeking'* section below for how these values were obtained). Table 6 shows the same data, but combined into three different possible definitions of 'help-seeking': i) *small hints* plus *large hints* plus full answers (so only *no help* is counted as 'non-help-seeking'); ii) *large hints* plus *full answers* (so *no help* and *small hints* are counted as 'non-help-seeking'); and iii) *full answers* (so *no help*, *small hints* and *large hints* are counted as 'non-help-seeking').

Table 5.

The mean percentages (and standard deviations) of no help, small hints, large hints and full answers participants sought on anagrams they were unable to answer.

Seeking	Overall		Interpersonal Condition		Intergroup Condition		M-S Condition	
	M	SD	M	SD	M	SD	M	SD
<i>No help</i>	3.55	16.90	0.00	0.00	9.74	29.37	1.71	6.26
<i>Small hints</i>	33.66	31.04	29.48	27.93	37.59	32.19	34.59	33.84
<i>Large hints</i>	50.95	32.23	60.17	29.17	38.79	32.14	52.10	33.17
<i>Full answers</i>	11.84	25.47	10.35	21.08	13.88	30.08	11.59	26.19

Table 6.

The mean percentages (and standard deviations) of no help, small hints, large hints and full answers participants sought on anagrams they were unable to answer, categorized into three potential definitions of 'help-seeking'.

Definition	Overall		Interpersonal Condition		Intergroup Condition		M-S Condition	
	M	SD	M	SD	M	SD	M	SD
Small + Large + Full	96.45	16.90	100.00	0.00	90.26	29.37	98.29	6.26
Large + Full	62.79	32.76	70.52	27.93	52.67	34.78	63.69	34.56
Full	11.84	25.47	10.35	21.08	13.88	30.08	11.59	26.19

Examining Table 6 reveals that adopting the *small hints* plus *large hints* plus *full answers* definition of help-seeking would produce a ceiling effect. This is because, for anagrams that could not be answered, almost all of participants' responses (96.45%) would be counted as 'help-seeking'. On the other hand, adopting the *full answers* definition of help-seeking would produce a floor effect. This is because, for anagrams that could not be answered, almost none of participants' responses (11.84%) would be counted as 'help-seeking'. In light of these observations, the *large hints* plus *full answers* definition of help-seeking was adopted, which prevented both ceiling and floor effects (here, for anagrams that could not be answered, 62.79% of participants' responses would be counted as 'help-seeking').

This decision was vindicated by an examination of the standardized skew and kurtosis values for each of the three potential definitions of help-seeking (obtained by dividing the relevant skew/kurtosis value by its standard error, Field 2005); see Table 7. Confirming the suspicions outlined above regarding floor and ceiling effects, skew and kurtosis values were found to be lowest when help-seeking was defined as *large hints* plus *full answers*. This suggests that this definition of help-seeking provides the best distribution of the data: a conclusion confirmed by Figures 2, 3 and 4, which display the distribution of the help-seeking variable when help-seeking is defined as

small hints plus large hints plus full answers; large hints plus full answers; and full answers respectively.

Table 7.

The standardized skew and kurtosis values for each of the three definitions of ‘help-seeking’.

Help-Seeking definition	Overall (collapsing across conditions)	
	Skew (standardized)	Kurtosis (standardized)
<i>Small + Large + Full</i>	-19.20	52.77
<i>Large + Full</i>	-2.17	-1.19
<i>Full</i>	8.48	8.94

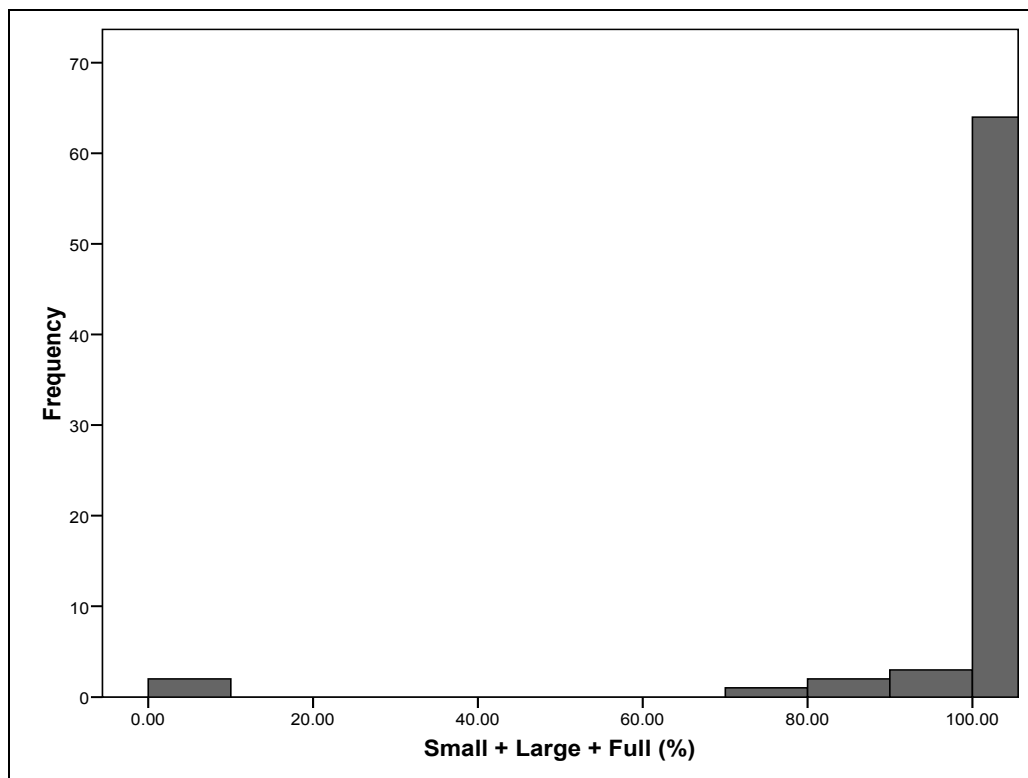


Figure 2. The distribution of the help-seeking variable when it is defined as *small hints plus large hints plus full answers*.

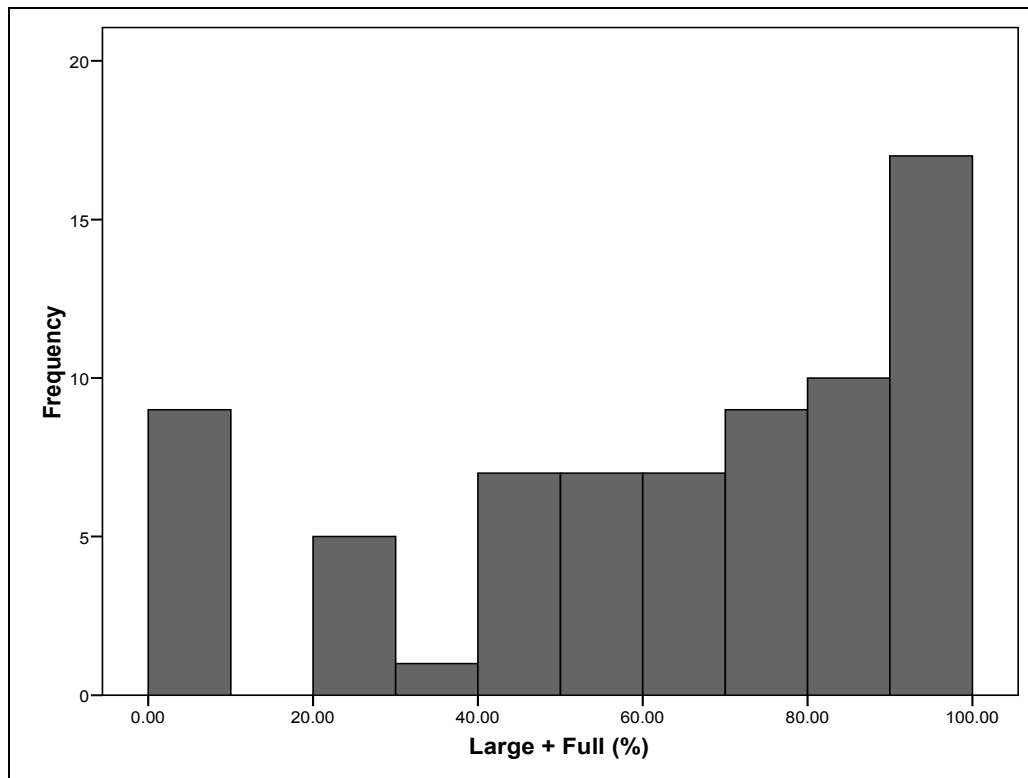


Figure 3. The distribution of the help-seeking variable when it is defined as *large hints* plus *full answers*.

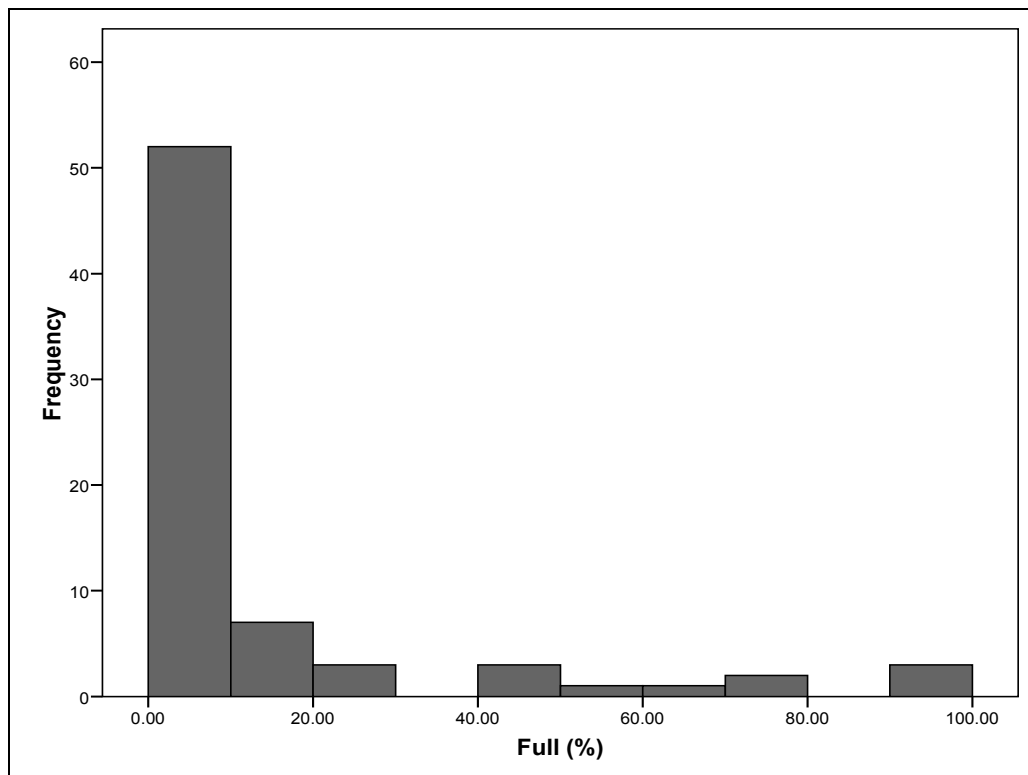


Figure 4. The distribution of the help-seeking variable when it is defined as *full answers*.

The *large hints* plus *full answers* definition of help-seeking also makes theoretical sense. A key aim of the studies in this thesis is to activate participants' feelings of group-related image threat. In the present study, it is unlikely that the 'lower value' help-seeking responses (*no help* and *small hints*) would have been sufficiently threatening to participants' female social identity, since the extent of the request was either nil or negligible. Indeed, participants may have requested *small hints* to appear polite and pro-normative (since help-seeking was encouraged in the study), without experiencing the threat inherent in asking for *large hints* or *full answers*. This interpretation is also supported by the fact that responses of *no help* and *small hints* would have been unlikely to lead to participants attaining their goal of gaining correct answers to the anagrams, many of which were very difficult.⁹

Calculating 'help seeking'. Using this definition, help-seeking values were obtained by calculating the numbers of *large hints* and *full answers* sought by each participant, adding these together, and then dividing this overall value by the number of anagrams participants failed to answer correctly. The resultant value was then multiplied by 100 to obtain a percentage. It should be noted that this calculation involves an interpreted analysis of help-seeking (i.e., it was decided that help-seeking responses related to correctly-answered anagrams-which invariably involved a response of *no help*-would not be counted). This is why help-seeking values were divided by the number of anagrams the participant answered incorrectly/left blank, rather than simply the total number of anagrams (10). This approach was used in all

⁹ It might also be the case that the shift from *no help* and *small hints* to *large hints* and *full answers* represents Nadler et al.'s (2003) conceptual transition from autonomy-based to dependency-based help. Nadler et al. suggested this shift indicates a qualitative change in how help is conceptualised by the recipient, which lends further support to the way that 'help-seeking' was defined in the present study. Furthermore, although it could be argued that seeking *full answers* is equivalent to 'giving up' rather than attempting to further one's goals, it should be noted that the normativeness of help-seeking was emphasised in the study, so it is unlikely participants would have perceived *full-answer* seeking as synonymous with 'giving up' in this context.

studies in this thesis where help-seeking was measured. This is because help-seeking decisions for correct responses were not deemed to constitute a strategic refusal of help; they simply indicated that the participant was aware she had answered the anagram correctly, and therefore did not require any assistance. Using this procedure in the present study meant 87.50% of participants were categorised as having sought help (regardless of the extent of that help, i.e., this means that 87.50% of participants sought at least one *large hint* or *full answer* on an item they could not answer).

Extent of help-seeking. Using this definition of help-seeking, the main effect of condition was non-significant, $F(2, 69) = 1.82, p = .17, \eta^2 = .05$. Since, as predicted, participants in the Interpersonal condition sought more help ($M = 70.52, SD = 27.93$) than participants in either the Intergroup ($M = 52.67, SD = 34.78$) or Meta-Stereotype Salient conditions ($M = 63.69, SD = 34.56$; see Table 8), simple planned comparisons were used to investigate the differences between these means. The analyses revealed participants in the Interpersonal condition sought marginally more help than participants in the Intergroup condition ($p = .06$)¹⁰, but non-significantly more help than participants in the Meta-Stereotype Salient condition ($p = .46$). A post-hoc Gabriel comparison indicated that participants in the Meta-Stereotype Salient condition sought non-significantly more help than participants in the Intergroup condition ($p = .58$).¹¹

Additional Variables

Participants' perceived puzzle-solving skills, endorsement of benevolent sexism, negative reactions to the meta-stereotype and affect levels did not differ

¹⁰ Carrying out a between-groups *t*-test reveals the same result.

¹¹ A post-hoc test was selected for this analysis because the means were not in the direction predicted. Furthermore, a Gabriel analysis was selected because there were slightly different *N*s in each of the conditions, and Field (2005) notes that the Gabriel test is particularly suitable in such circumstances. For interest, the analysis was repeated with the often-used Bonferroni corrected *t*-test post-hoc comparison, and this also revealed a non-significant result.

significantly between-condition and added nothing to any analysis, so will not be discussed (see Table 8 for between-condition means and standard deviations for the major variables). The following sections discuss the results from key variables, including strength of female identification and perceived meta-stereotype trait unfairness.

Level of Female Identification

Since post-manipulation level of identification was the only identity measure that featured in all three experimental conditions, the between-condition means for this variable were compared. The main effect of condition was non-significant, (Interpersonal $M = 2.43$, $SD = 0.61$, Intergroup $M = 2.36$, $SD = 0.80$, Meta-Stereotype Salient $M = 2.43$, $SD = 0.85$; $F(2, 69) = 0.08$, $p = .92$, $\eta^2 = .002$).

Table 8.

Condition means and standard deviations for major variables.

Variables	Experimental Condition					
	Meta-Stereotype <i>M</i>	<i>SD</i>	Intergroup <i>M</i>	<i>SD</i>	Interpersonal <i>M</i>	<i>SD</i>
Help-seeking (% large + % full)	63.69	34.56	52.67†	34.78	70.52†	27.93
Positive affect ^b	2.30	0.59	2.06	0.50	2.13	0.55
Perceived m-s unfairness	2.67*	0.78	2.30* (vs. 2.67)	0.69	2.24* (vs. 2.67)	0.69
Negative reactions to meta-stereotype ^b	2.04	0.65	2.26	0.64	1.97	0.49
Level of female identification (post) ^c	3.24	0.85	2.99	0.88	N.A.	N.A.
Level of female identification (post) ^b	2.43	0.85	2.36	0.80	2.43	0.61
Benevolent sexism endorsement ^b	2.02	0.69	1.88	0.66	1.94	0.58
Puzzle solving skills ^a	1.31	0.48	1.56	0.43	1.32	0.55
How sexist are the researchers? ^b	1.42	1.02	1.67†	1.02	1.12†	0.99

^a = 0-3 scale, ^b = 0-4 scale, ^c = 0-5 scale, N.A. = data not available in that condition.

Perceived unfairness tests are one-tailed.

* = $p < .05$, † = $p < .10$.

Perceived Meta-Stereotype Trait Unfairness

A one-way ANOVA revealed a marginal main effect of experimental condition on perceived meta-stereotype trait unfairness, $F(2, 69) = 2.53, p = .087, \eta^2 = .07$.¹² One-tailed (prediction-based) planned comparisons indicated that, as predicted, perceived meta-stereotype trait unfairness was significantly higher in the Meta-Stereotype Salient condition ($M = 2.67, SD = 0.78$) than in either the Interpersonal condition ($M = 2.24, SD = 0.69; p = .02$) or the Intergroup condition ($M = 2.30, SD = 0.69; p = .045$). The difference between the Intergroup and Interpersonal conditions was non-significant ($p = .39$). These results indicate that, as expected, perceived meta-stereotype trait unfairness was highest when participants were in an intergroup context where they were encouraged to think about the meta-stereotype.

Analysis of Conditional Indirect Effects

Although there were no significant differences in help-seeking levels between the Meta-Stereotype Salient condition and the other two conditions, the possibility that experimental condition might indirectly affect help-seeking through a mediating variable was considered (see Appendix 1 for details of this procedure). As mentioned previously, perceived meta-stereotype trait unfairness was deemed to be the most theoretically-relevant mediating variable. This was because participants in the Meta-Stereotype Salient condition were predicted to dwell on men's negative perceptions of women to a greater extent than other participants, thereby increasing their perceived unfairness of the dependency-related traits. Analyses were therefore carried out to investigate this possibility.

It was also predicted that help-seeking would be moderated by participants' individual differences in level of ingroup identification (with high identifiers being

¹² It should be remembered that although the meta-stereotype was not made salient in all conditions, all participants received (post-manipulation) items enquiring about how unfair it would be for them to be perceived in dependency-related terms.

most affected by the manipulations, since they tend to be most invested in the group, e.g., Ellemers et al., 1999). The effect of perceived meta-stereotype trait unfairness on the relationship between experimental condition and help-seeking at different levels of identification was thus investigated with an analysis of conditional indirect effects (Preacher, Rucker, & Hayes, 2007, see Figure 5 and Appendix 1).

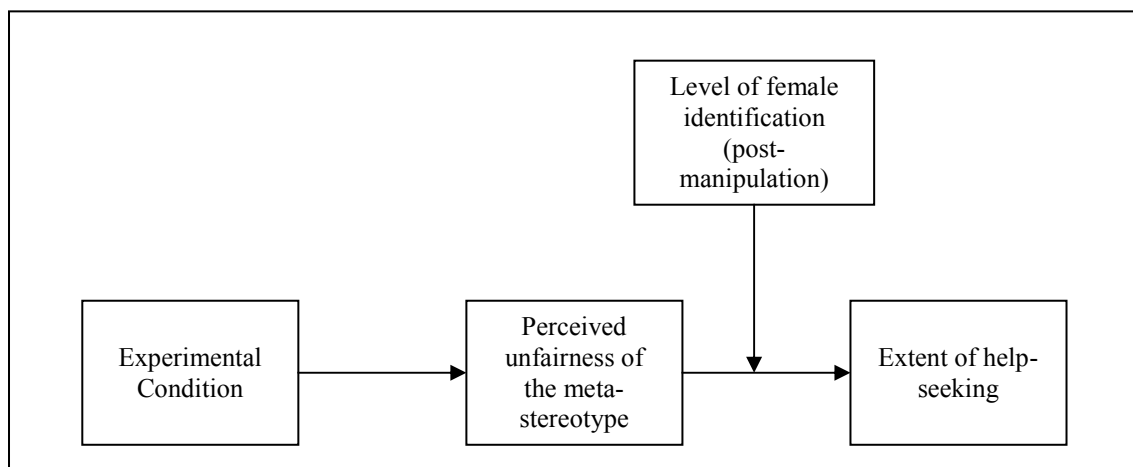


Figure 5. The conditional indirect effects model.

This analysis can only compare two experimental conditions at once, meaning that three separate comparisons are required (Interpersonal vs. Intergroup, Interpersonal vs. Meta-Stereotype Salient and Intergroup vs. Meta-Stereotype Salient). However, since one of these comparisons (Intergroup vs. Meta-Stereotype Salient) yielded help-seeking means that were not in the direction predicted, it is not theoretically legitimate to consider what processes might be indirectly affecting this (non-predicted) result (Preacher, 2009).¹³ For this reason, only two comparisons are reported: Interpersonal vs. Meta-Stereotype Salient and Interpersonal vs. Intergroup.

¹³ Nonetheless, for completeness, the analysis described below was carried out for the Intergroup vs. Meta-Stereotype Salient comparison. It was found to be non-significant.

Since only post-manipulation level of identification was measured in the Interpersonal condition, the post-manipulation measure was used in both analyses.

Interpersonal vs. Meta-Stereotype Salient

The conditional indirect effects model was tested using the MODMED SPSS macro written by Preacher et al. (2007), (see Appendix 1 for statistical details). The Independent Variable was experimental condition, the mediator variable was perceived meta-stereotype trait unfairness, the moderator variable was post-manipulation level of identification and the Dependent Variable was extent of help-seeking. To reduce the risk of multicollinearity, all predictor variables were standardized by obtaining their z -scores (Aiken & West, 1991).

Preacher et al. (2007) note that two specific paths are of interest when interpreting this conditional indirect effects model (see Appendix 1 for details). Analysis revealed both key paths to be significant: i) IV to mediator: when the Meta-Stereotype Salient and Interpersonal conditions were compared, experimental condition significantly predicted perceived trait unfairness (with unfairness being higher in the Meta-Stereotype Salient condition than in the Interpersonal condition; $coeff. = 0.29$, $SE = 0.14$, $t = 2.06$, $p = .04$; see Table 9, second row), and ii) the interaction between the mediator and moderator to the DV: the interaction between perceived trait unfairness and identification level significantly predicted help-seeking, ($coeff. = -9.04$, $SE = 3.64$, $t = -2.48$, $p = .02$; see Table 9, seventh row). This indicates that although experimental condition indirectly affected help-seeking via perceived unfairness, this effect was conditional on (i.e., was moderated by) participants' ingroup identification.

Table 9.

Results of the conditional indirect effects analysis: Interpersonal vs. Meta-Stereotype Salient, with post-manipulation level of identification as the moderator.

Predictor	Coeff.	SE	t
DV = Perceived Unfairness (the mediator in the model)			
Constant	0.00	0.14	0.00
Condition (Interpersonal vs. Meta-Stereotype)	0.29	0.14	2.06*
DV = Help-seeking (the DV in the model)			
Constant	69.04	4.10	16.85***
Condition (Interpersonal vs. Meta-Stereotype)	1.67	4.33	0.39
Level of identification (post)	2.63	4.23	0.62
Perceived unfairness	-11.56	4.35	-2.66*
Unfairness x identification	-9.04	3.64	-2.48*

*** = $p < .001$, * = $p < .05$.

Bootstrapping analysis. To investigate the significant moderating effect of level of identification on the relationship between experimental condition and help-seeking (via perceived trait unfairness) in more depth, bootstrapping analysis was used to estimate the size of the conditional indirect effect at specific levels of the moderator variable (Preacher et al., 2007), (see Appendix 1 for statistical details). Bias corrected and accelerated 95% confidence intervals revealed that when level of female identification was high (one standard deviation above the mean), the conditional indirect effect was significant at $p < .05$ (*Upper CI* = -0.47, *Lower CI* = -14.65). However, when the same analysis was repeated for low female identifiers (one standard deviation below the mean), the conditional indirect effect was non-significant, (*Upper CI* = 2.39, *Lower CI* = -6.42). This indicates that although overall levels of help-seeking in the two conditions did not differ significantly, there was an indirect effect of condition on help-seeking via perceived meta-stereotype trait unfairness (but only for participants who identified relatively highly as women).

Simple slopes analysis. To enable the nature of the moderating effect of identification in the latter part of the conditional indirect effects model (i.e., between *perceived trait unfairness* and *help-seeking*) to be examined, a regression analysis was carried out after controlling for the effect of experimental condition. This was achieved by also entering the (standardized) experimental condition variable into the first block of the regression; see Appendix 1 for details. As expected, the interaction between standardized identification and standardized unfairness significantly predicted help-seeking, $R^2 = 0.23$, $\Delta R^2 = 0.11$, $F(1, 45) = 6.17$, $p = .02$. This interaction was then plotted using simple slopes analysis (Preacher, Curran, & Bauer, 2006). The analysis involved plotting participants' help-seeking behaviour at one standard deviation above ('high') and one standard deviation below ('low') the means of the standardized identification and unfairness variables (see Figure 6). The results indicated (as suggested by the conditional indirect effects analysis) that perceptions of the meta-stereotype traits as highly unfair only reduced participants' help-seeking if they identified highly (rather than lowly) with the ingroup (*simple slope* = -20.60, $SE = 5.80$, $t = -3.55$, $p = .001$). Meanwhile, level of identification had no effect on help-seeking for participants who did not perceive the meta-stereotype traits to be highly unfair. Instead, these participants sought moderate levels of help regardless of identification (*simple slope* = -2.52, $SE = 5.55$, $t = -0.45$, $p = .65$). These results thus support the interpretation of the conditional indirect effects analysis reported above.¹⁴

¹⁴ The data were found to meet the assumptions of regression analysis. An outlier analysis was also performed, and only one case was found to have a standardized residual more than two standard deviations from the regression line. Additionally, one case also had a leverage value that exceeded Stephen's (1992) criterion of three times the average leverage value of the sample, while four other cases exceeded the more conservative criterion of twice the average leverage value of the sample (Hoaglin & Welsch, 1978). Removing all five cases (plus the outlier) and repeating the moderation analysis produced a non-significant result ($R^2 = 0.25$, $\Delta R^2 = 0.04$, $F(1, 39) = 1.90$, $p = .18$). However, when Stephen's more lenient criterion was adopted (leading to one case being removed due to its large leverage value, plus the outlier being removed), the interaction between unfairness and identification still predicted help-seeking ($R^2 = 0.26$, $\Delta R^2 = 0.06$, $F(1, 43) = 3.37$, $p = .07$). This suggests that the most aberrant cases in the data-file were not having an unduly large effect on the regression, and that

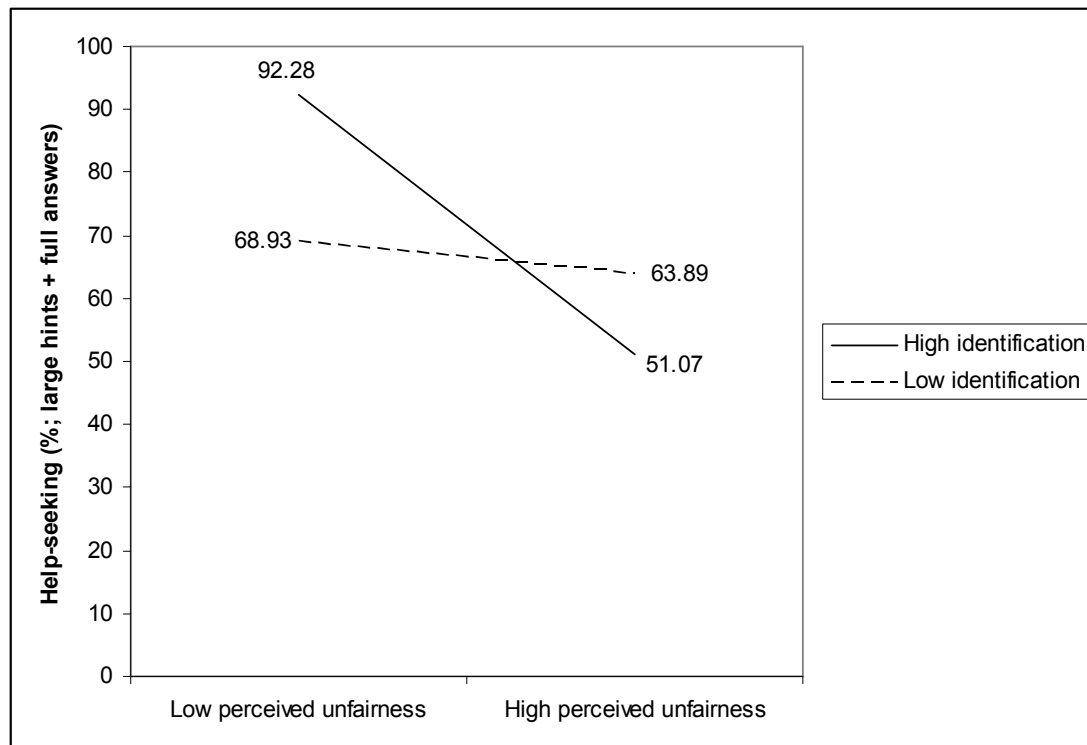


Figure 6. The moderating effect of identification on the relationship between perceived meta-stereotype trait unfairness and help-seeking, after controlling for experimental condition.

Reversing the model. Since perceived meta-stereotype trait unfairness was measured *after* help-seeking, the distinctiveness of the full conditional indirect effects model (see Figure 5) was tested by repeating the analysis after reversing the perceived unfairness and help-seeking variables in the model (so that perceived trait unfairness became the outcome variable and help-seeking became the mediator variable).

Although the interaction between help-seeking and level of identification predicted level of perceived unfairness ($coeff. = -.25$, $SE = .12$, $t = -2.08$, $p = .04$), experimental condition did not predict help-seeking ($coeff. = -.11$, $SE = .15$, $t = -.76$, $p = .45$).

Furthermore, bootstrapping analyses revealed that the model was non-significant at

the non-significant result that was obtained when the more conservative criterion was adopted was probably due to the reduction in power levels created by removing six cases. It was therefore felt that no case was having an unduly large effect on the regression analysis reported above, so the analysis could be interpreted legitimately.

both high (*Upper CI* = .44, *Lower CI* = -.09) and low levels of identification (*Upper CI* = .21, *Lower CI* = -.06). This indicates that the model is only significant when perceived unfairness is treated as a mediating variable and help-seeking is treated as an outcome variable (rather than the other way round).

Intergroup vs. Interpersonal

The conditional indirect effects analysis was then repeated for the Intergroup vs. Interpersonal comparison (see Table 10). Experimental condition was not found to predict levels of perceived trait unfairness, (*coeff.* = 0.04, *SE* = 0.15, *z* = 0.30, *p* = .77; see Table 10, second row). Moreover, the path from perceived trait unfairness to help-seeking was not found to be moderated by identification, (*coeff.* = -5.80, *SE* = 4.50, *t* = -1.29, *p* = .20; see Table 10, seventh row).

Table 10.

Results of the conditional indirect effects analysis: Intergroup vs. Interpersonal, with post-manipulation level of identification as the moderator.

Predictor	<i>Coeff.</i>	<i>SE</i>	<i>t</i>
DV = Perceived Unfairness (the mediator in the model)			
Constant	0.00	0.15	0.00
Condition (Intergroup vs. Interpersonal)	0.04	0.15	0.30
DV = Help-seeking (the DV in the model)			
Constant	60.75	4.55	13.36***
Condition (Interpersonal vs. Interpersonal)	-10.23	4.62	-2.21*
Level of identification (post)	3.41	4.91	0.70
Perceived unfairness	-8.11	4.62	-1.75†
Unfairness x identification	-5.80	4.50	-1.29

*** = $p < .001$, * = $p < .05$, † = $p < .10$.

These results indicate that, when the Intergroup and Interpersonal conditions were compared, ingroup identification did not moderate the path from perceived unfairness to help-seeking. Furthermore, since there was no effect of experimental

condition on perceived trait unfairness, there was no evidence of perceived trait unfairness acting as a mediating variable (even in the absence of the identification moderator variable).¹⁵

Discussion

The results provide tentative support for the study's main predictions. First, as hypothesised, participants in the Intergroup condition sought marginally less help on the anagram task from the male researchers than participants in the Interpersonal condition. This finding supports the idea that a salient intergroup context (as opposed to an interpersonal context) fosters concerns that make ingroup members generally

¹⁵ Before any of these analyses took place, the skew and kurtosis values of the help-seeking measure were analysed by dividing the two values by their respective standard errors. The resultant *z*-score values were then compared with Field's (2005) critical values of 1.96 (indicating a value significantly different from a normal distribution at $p < .05$) and 2.58 (indicating a value significantly different from a normal distribution at $p < .01$). Although kurtosis was non-significant ($z = 1.19$), skew was significantly negative at $p < .05$ ($z = -2.17$), (as can be seen in Table 7). Statisticians are undecided on whether it is worthwhile (or even entirely legitimate) to transform data that are deemed to be 'non-normal': Micceri (1989) noted that in the 440 sets of psychometric data he analysed, every set was non-normally distributed at $p < .05$. These results suggest that 'non-normality' may actually be the norm, rather than the exception, for many types of data. Micceri also noted that many researchers warn against transforming data, because it makes results difficult to interpret. Nonetheless, for the sake of completeness, the help-seeking data were transformed using the three main types of transformation: log-10, square-rooting and reciprocal transformation (Field, 2005). Since the skew was negative, the data were reversed before transforming (achieved by subtracting each value from the highest existing value of the variable). This reversal was shifted back after the transformation by subtracting each transformed value from the largest existing transformed value, so that large transformed values represented large untransformed values. The only transformation that did not worsen the distribution was square-rooting: when the transformed skew and kurtosis values were divided by their respective standard errors, both of the resultant values were non-significant ($z_{\text{skew}} = -1.19$, $z_{\text{kurtosis}} = 1.93$, $ps > .05$), indicating that the square-root transformation improved the distribution of the data. The key results were re-analysed using this transformed help-seeking variable, and these calculations revealed that, as before, the main effect of experimental condition on help-seeking was non-significant, $F(2, 72) = 1.71$, $p = .19$, $\eta^2 = .05$. Planned comparisons revealed that, as before, the difference between the Intergroup ($M = 3.87$, $SD = 3.20$) and Interpersonal conditions ($M = 5.65$, $SD = 3.31$) was marginally significant in the direction predicted ($p = .07$), while neither the planned comparison between the Interpersonal and the Meta-Stereotype Salient condition ($M = 5.08$, $SD = 3.56$, $p = .56$) nor the post-hoc comparison between the Intergroup and Meta-Stereotype Salient condition ($p = .53$) were significant (although, as before, help-seeking was actually slightly *higher* in the Meta-Stereotype Salient condition than in the Intergroup condition). The key perceived unfairness conditional indirect effects analyses were also re-analysed with the transformed data. As before, the analysis revealed that, when the Interpersonal and Meta-Stereotype Salient conditions were compared, perceived meta-stereotype unfairness had a significant ($p < .05$) indirect effect on the relationship between experimental condition and help-seeking, but only at high levels of ingroup identification (*Upper CI* = $-.04$, *Lower CI* = 0.77), rather than at low levels (*Upper CI* = $.56$, *Lower CI* = $-.21$). In light of these findings, it was decided to use the non-transformed help-seeking data, because transforming the data did not alter the key results, and using non-transformed data makes interpretation easier.

reluctant to seek outgroup help. This may involve concerns about the ingroup being perceived as incompetent or dependent in the eyes of outgroup members, since these are key traits often associated with the act of help-seeking (e.g., Lee, 2002).

More importantly, focussing on the key Meta-Stereotype Salient condition, conditional indirect effects analysis revealed support for the strategic help-seeking hypothesis. Specifically, when compared with the Interpersonal condition, the Meta-Stereotype Salient condition impacted on help-seeking in the manner predicted via perceived meta-stereotype trait unfairness, which inhibited help-seeking for participants who identified highly as women. The relevance of the perceived unfairness and identification variables will be discussed in turn.

Perceived Meta-Stereotype Trait Unfairness

Hopkins et al. (2007) noted that for a meta-stereotype to affect ingroup members' behaviour, it must be perceived as unfair. Indeed, the current study revealed levels of perceived meta-stereotype trait unfairness to be higher in the Meta-Stereotype Salient condition than in either of the other two conditions. This suggests that the manipulations in the Meta-Stereotype Salient condition encouraged participants to think about the fact that (some) men stereotype women as dependent, and to reflect on their own beliefs regarding the unfairness of this depiction.

Importantly, the perceived unfairness of the meta-stereotype traits had behavioural implications. The results of the conditional indirect effects analysis suggest that although there was a non-significant difference in help-seeking levels between the Interpersonal and Meta-Stereotype Salient conditions, the Meta-Stereotype Salient condition manipulation encouraged participants to perceive the meta-stereotype-related traits as more unfair than participants in the Interpersonal condition. Moreover, it was this perceived trait unfairness which ultimately affected

help-seeking behaviour for high identifiers. Perceived meta-stereotype trait unfairness was not found to have this mediating effect when the Intergroup and Interpersonal conditions were compared (primarily because levels of perceived trait unfairness did not differ significantly between these two conditions). This is in-keeping with the study's predictions, since perceived meta-stereotype trait unfairness would not be expected to have an effect on the relationship between condition and help-seeking when neither of the two conditions being compared involved a salient meta-stereotype.

Level of Female Identification

As mentioned above, when the Interpersonal and Meta-Stereotype Salient conditions were compared, level of female identification was found to moderate the indirect effect of experimental condition on help-seeking via perceived meta-stereotype trait unfairness. Specifically, when these conditions were compared, the path from perceived meta-stereotype trait unfairness to help-seeking was found to be moderated by female identification, with high perceived unfairness leading to low levels of help-seeking for high identifiers (but not for low identifiers). This suggests that identification affected whether high levels of perceived unfairness translated into actual behaviour (i.e., a decline in help-seeking). This is consistent with predictions: it is well-documented that highly-identifying ingroup members tend to be particularly invested in the group (e.g., Ellemers, Spears, & Doosje, 2002) and are usually especially motivated to protect the group's reputation (e.g., Nadler & Halabi, 2006). It therefore appears that perceiving the meta-stereotype as unfair is not enough to promote strategic help-seeking behaviour: participants must also identify highly with the group.

Conditional Indirect Effects: Isolating the Role of the Salient Meta-Stereotype

However, it is not clear whether the results of the conditional indirect effect analysis were due to the salient meta-stereotype per se, or due merely to the introduction of a salient intergroup context (which was present in the Meta-Stereotype Salient condition and absent in the Interpersonal condition). To untangle these effects, it would be necessary to compare the Intergroup and Meta-Stereotype Salient conditions (since both conditions involve a salient intergroup context, but only the latter involves a salient meta-stereotype). However, since the means were not in the predicted direction for this comparison (i.e., help-seeking was non-significantly higher in the Meta-Stereotype Salient condition than in the Intergroup condition), this was not possible. The key aim of the next study (Study 3) is therefore to investigate the Intergroup vs. Meta-Stereotype Salient comparison in more depth, to test for a significant difference (in the expected direction) between these conditions.

Gender Identity

One possible reason why the help-seeking results obtained in the present study were not entirely as predicted may relate to the nature of the identity employed. Although it is likely that all social identities hold different meanings for different people and in different contexts, this is especially true for a binary identity such as gender (e.g., Condor, 1989). Since the vast majority of the world can be categorized as either male or female, it is inevitable that large amounts of intragroup variation will occur. This is exemplified in the phenomenon of sub-groups (smaller groups that exist within large groups), which play important roles in both gender identities (Vonk & Olde-Monnikhof, 1998). Sub-group identification makes the female identity “multifaceted and transient” (Skevington & Baker, 1989, p.6) and can have important effects on the ways in which ingroup members relate to their social group: for instance, Cameron & Lalonde (2001) found that women who define themselves as

members of the sub-group *feminist women* perceive the female social group to be more cognitively central to their own personal identity than do women who define themselves as members of the sub-group *traditional women*. This leads to inevitable differences between these sub-groups of women in terms of how they conceptualise their gender identity.

There has been a substantial volume of work on the multiple female sub-groups that exist, and the traits and qualities associated with each (DeWall et al., 2005; Six & Eckes, 1991). Ingroup members are likely to identify more with one or more of these sub-groups and to identify less with others depending on what ‘type’ of ingroup member they perceive themselves to be (Vonk & Olde-Monnikhof, 1998). For instance, one woman may categorise herself as a *career-woman*, a *feminist* and a *business-woman*, whilst another may categorise herself as a *traditional-woman* and a *homemaker* (DeWall et al., 2005). While both of these individuals categorise themselves as women, they attribute very different values and norms to that identity. This observation has two important implications for the present study.

First, it might help explain the low Cronbach’s alphas obtained for the trait-rating manipulations. It may be the case that when some of the participants were presented with the meta-stereotype trait-rating items in the Meta-Stereotype Salient condition (and the intragroup trait-rating items in the Intergroup condition), they agreed that men (or they themselves) perceive *some* sub-groups of women as dependent (e.g., *homemaker* or *sex-object*), but not the sub-group to which they perceived themselves as belonging (e.g., *professional* or *feminist*) (e.g., Noseworthy & Lott, 1984). Eckes (2002) considered how female sub-groups differ in terms of perceived competence and warmth (the two key stereotype dimensions, which are often translated into agency and communion in the context of gender groups), (Fiske,

Cuddy, & Glick, 2007). Eckes found that some female sub-groups are perceived as possessing high levels of warmth and low levels of competence (such as *housewives*), while others are perceived as possessing high levels of competence and low levels of warmth (such as *career women*). Fiske et al. (2007) suggested that the former type of sub-group will be met with paternalistic stereotypes (which include the concept of dependency, amongst other elements), but that the latter type will be met with envious and resentful stereotypes, making the concept of dependency far less relevant. This finding supports the idea that men (and women) do not stereotype all sub-groups of women as 'dependent'. In the context of the present study, if participants in the Meta-Stereotype Salient condition completing the trait-rating task were thinking about women in terms of such specific sub-groups (with each sub-group varying in terms of the degree to which members thought they would be perceived as dependent), then it would be unlikely that participants would agree on the extent to which men perceive women as dependent.

Second, the observation regarding female sub-groups could help explain why help-seeking levels in the Meta-Stereotype Salient condition were not as low as predicted. Specifically, it may be possible for women to avoid the threat associated with a sexist stereotype by rationalizing that men stereotype *some* sub-groups of women as dependent, but not the sub-group/s to which participants perceive themselves as belonging. If so, this could mean that the effect of the manipulation in the present study was weakened. Since the study was carried out with university students (who would probably be more likely to define themselves as belonging to 'competent' female sub-groups, such as *professional women* and *feminists*, rather than 'incompetent' sub-groups such as *homemakers*), it is certainly conceivable that this process may have occurred. Future studies in this thesis involving female identity

therefore include items which enquire about the sub-groups to which participants feel they belong.

Conceptualisation of the Helpers

Just as it is important to consider how participants perceived themselves during the study, it is also important to investigate how they perceived and conceptualised the potential helpers. Although such perceptions are likely to be complex and multi-faceted, two aspects are of particular importance: the potential helpers' masculinity and their pre-defined role as helpers.

In terms of their masculinity, previous work has indicated that, just as the female identity is composed of sub-groups, so too is the male identity (e.g., Vonk & Olde-Monnikhof, 1998). Furthermore, like female sub-groups, different male-subgroups are associated with different stereotypes and qualities (Eckes, 2002). Importantly, some sub-types of men could potentially be perceived as (stereotypically) endorsing dependency-related images of women (e.g., *typical man* or *social climber*) to a greater extent than other sub-types (e.g., *intellectual* or *hippy*), (Eckes, 2002). The nature of the sub-group to which the potential helpers were perceived as belonging could thus have had implications for how participants perceived them, and, more importantly, how willing participants were to seek help from them. Since male academic Psychologists are probably more likely to be stereotyped as *intellectuals* than *typical men*, it could be the case that the potential helpers were not perceived as highly threatening (a possibility supported by the finding that participants generally perceived the men as only weakly advocating the female dependency meta-stereotype). Future studies using gender identity in this thesis therefore involve attempts to ensure that male helpers are perceived as

belonging to a male sub-group that (stereotypically) endorses dependency-related perceptions of women.

In terms of the men's role as helpers, it is important to consider the fact that helpers deemed to have specific expertise on the topic or dimension in question are responded to differently than those perceived to possess no such skill (Amato & Saunders, 1985; Bogart, 1998). In the present study, participants may have considered the male researchers to be 'anagram experts', since it was explained that these men devised the anagrams, so were therefore in a position to offer help on the task. This, coupled with the fact that these men were presented as researchers (whose main role in this context was to provide help), may have led participants to become more focused on the positive aspects of the men's presence (i.e., their apparent expertise and their pre-defined roles as helpers), rather than their threatening aspects (i.e., their masculinity, and men's apparent beliefs about women being inferior and dependent). With this in mind, future studies in this thesis include items that examine participants' general understandings and perceptions of the potential helpers, and enable investigation of how these conceptualisations may affect help-seeking behaviour.

Conceptualisation of the Audience

It is also the case that, just as the nature of the helpers can be seen as ambiguous in the present study, so too can the nature of the audience. Although no audience-related items were included in the questionnaires, it is unclear whether participants perceived the male researchers to be the sole observers of their help-seeking behaviour, or whether they considered the experimenter (a female student) to also be an element of the audience. Hopkins et al. (2007) noted the importance of the presence of an outgroup audience (and participants being aware of that presence) for meta-stereotypes and their related compensatory behaviours to be activated. This was

ensured in the present study by presenting participants with the male researchers' photographs, and asking participants in the Intergroup and Meta-Stereotype Salient conditions to include their sex on the front cover of the consultation form.

Nonetheless, it could be argued that participants may have also considered the experimenter to be a member of the audience, since it was explained that the experimenter would be taking the consultation form along the corridor to the male researchers (and she would thus have had opportunity to check the participant's answers). The effects of this potential ingroup audience are difficult to predict: it could largely depend on which sub-group of the female identity the experimenter was placed in by the participants, and how this corresponded to their own sub-group memberships. If the sub-groups differed, then the experimenter could potentially be perceived as an outgroup sub-group member, whereas if the sub-groups matched, then the experimenter would be considered to be an ingroup sub-group member. Vonk and Olde-Monnikof (1998) found participants evaluated and rated ingroup sub-groups more positively than outgroup sub-groups, which indicates the importance of sub-group categorisations in this context. Since there are no data to hint at how the experimenter was stereotyped by participants, no clear conclusions can be drawn. However, this issue is investigated at a later point in this thesis.

Nature of the Consultation Form

A final issue involves the fact that although Intergroup and Meta-Stereotype Salient participants were required to include their sex on the cover of their consultation form, this was not the case for Interpersonal participants (since it was feared that asking Interpersonal condition participants to include their sex might have created an intergroup comparative context). However, it is also possible that this design-feature may have had unintended side-effects. For example, by providing less

information about themselves than participants in the other conditions, Interpersonal condition participants may have felt less exposed to others and hence experienced less evaluation apprehension, thereby making them less concerned about seeking help.

This potential confound is remedied in the design-changes implemented in Study 3.

Conclusions and Future Directions

Through the use of an improved design and behavioural measures, the present study provided stronger evidence than Study 1 in support of the strategic help-seeking hypothesis. Most importantly, when the Meta-Stereotype Salient and Interpersonal conditions were compared, a salient meta-stereotype led to higher levels of perceived meta-stereotype trait unfairness, which in turn led to a reduction in help-seeking (but only for participants who identified highly with the ingroup). This finding is consistent with predictions.

However, to show that this reduction in help-seeking relates to the presence of a salient meta-stereotype (rather than simply to a salient intergroup comparative context), help-seeking must be shown to be lower in the Meta-Stereotype Salient condition than in the Intergroup condition. Since the present study did not yield prediction-consistent results with regards to this comparison, this issue was investigated in more depth in Study 3, using an improved design.

Chapter 9

Study 3: A development of Study 2 using a non-binary identity (nationality).

Study 2 expanded on Study 1's investigations by providing behavioural evidence to support the concept of strategic help-seeking. Most notably, the conditional indirect effects analysis in Study 2's results revealed that the Meta-Stereotype Salient condition led to higher levels of perceived meta-stereotype trait unfairness than the Interpersonal condition, with this perceived unfairness then leading to reduced help-seeking from a group of males (but only for participants who identified strongly as women).

However, although Study 2 also revealed lower levels of help-seeking in the Intergroup condition than the Interpersonal condition, the same (predicted) effect was not obtained for the key Intergroup vs. Meta-Stereotype Salient comparison. Obtaining this latter effect is important: it would provide evidence to support the claim that salient meta-stereotypes have unique effects on help-seeking behaviour, which go beyond the influence of simple intergroup processes. With this issue in mind, the present study was intended to investigate the concept of strategic help-seeking in more depth, using the same three-condition design as Study 2 (Interpersonal, Intergroup and Meta-Stereotype Salient), but with a number of additional and improved elements. Before describing the nature of this design in detail in the Method section, the five key areas of improvement will be outlined.

Improvements on Study 2

i) The Salient Identity and Related Meta-Stereotype

As mentioned earlier, a potential problem with Study 2 was the choice of identity: large binary identities such as gender are problematic, not least because of

the numerous and complex sub-group identities that exist within the two larger identities, each with their own specific norms and contents (e.g., Vonk & Olde-Monnikhof, 1998). As discussed in Study 2, this issue of sub-groups could have been responsible for help-seeking levels being higher than predicted in the Meta-Stereotype Salient condition. The issue of sub-groups may also have been responsible for the low trait-rating scale alphas in Study 2.

Identity. As a way of remedying this issue, the present study involved a smaller (and non-binary) identity: nationality (with the Scots as the ingroup and the English as the outgroup). The Scottish/English divide has been used with success in previous social identity-related studies (e.g., Hopkins & Moore, 2001; Hopkins, Reicher, & Harrison, 2006; Hopkins et al., 2007) since it invokes long-standing and deeply-entrenched rivalries between these neighbouring countries. Moreover, Hopkins, Regan and Abell (1997) found that the way in which the Scots perceive themselves is dependent upon the comparisons they make between themselves and the English, making this intergroup context particularly appropriate for use in meta-stereotyping research.

Meta-stereotype. One of the most well-known stereotypes that the English (and other nationalities) hold about the Scots is that they are mean, miserly and overly-careful with money (Allardyce & Belgutay, 2009; Henry, 2000). This stereotype is undoubtedly a point of contention for many Scots: as well as concluding that Scots perceive this stereotype as unfair, Hopkins et al. (2007) found that Scottish participants primed with this meanness meta-stereotype behaved more generously and claimed the Scots are more generous (compared to participants who did not receive the prime). Hopkins et al. believed it was this feeling of unfairness and indignation at

being perceived as mean that was the catalyst for the meta-stereotype challenging behaviour observed in their studies.

Using the findings of Hopkins et al. as a starting point, the present study involved a slight alteration to how the traditional ‘Scottish miser’ stereotype was presented to participants, with the aim of making the stereotype more relevant to the concept of strategic help-seeking. Rather than simply highlighting Scottish meanness and lack of generosity, this stereotype was elaborated and extended, so as to reinforce the idea that Scots are unwilling to reciprocate any assistance they receive, and tend to depend too much on others (especially the English). Participants in the Meta-Stereotype Salient condition were thus encouraged to think about the fact that the English perceive the Scots as being overly-reliant on others for help, and that they (the Scots) never return the favour. That is, the well-known stereotype of miserly Scots was therefore elaborated to include a further (more dependency-related) element. This elaboration adds a new facet to the ‘original’ stereotype, but the two concepts of meanness and dependency are compatible, because both speak to a general reluctance or unwillingness to help others and a desire to take whatever is available, without becoming concerned with trying to repay the debt. The meta-stereotype is therefore similar to the female meta-stereotype used in Study 2, since the focus is on being dependent on others, and could potentially be challenged by participants avoiding seeking help from an outgroup (English) individual.

ii) Revealing One’s Ingroup Status in the Interpersonal Condition

A final issue related to social identity is the question of whether participants in the Interpersonal (control) condition should be given the impression that the potential (outgroup) helper is aware of the participants’ membership of the ingroup. Hopkins et al. (2007) noted that for meta-stereotype-challenging behaviour to occur, it is

important for participants to believe that the outgroup member is aware of the participants' ingroup membership. This is not an important prerequisite in the Interpersonal condition however, since no meta-stereotype (or even intergroup context) is being made salient. Indeed, (as mentioned in Study 2), asking participants in the Interpersonal condition to make their group membership known to an outgroup member may increase the risk of inadvertently making an intergroup context salient during the helping transaction. In Study 2, therefore, participants in the Interpersonal condition did not include their sex on the front cover of their consultation forms, whilst participants in the Intergroup and Meta-Stereotype Salient conditions did.

Although there is clear merit in this approach, it creates a difference between the conditions in terms of the amount of personal information revealed by participants (see Study 2 Discussion). For this reason, all participants in the present study (regardless of condition) were asked to include their nationality on their help-seeking form. Since participants in the Interpersonal condition were not subjected to the same manipulations as participants in the Intergroup and Meta-Stereotype Salient conditions (and hence their nationality should not have been salient), it was expected that divulging one's nationality to the potential helper (before even being aware they were English) would not hold the same significance for participants in the Interpersonal condition as it did for participants in the other two conditions. This adaptation therefore meant that national identity salience could be prevented during the help-seeking episode in the Interpersonal condition, whilst also ensuring that the extent of participants' revelations was constant across-condition.

iii) The Normativity of Help-Seeking

Help-seeking was presented as a highly normative behaviour in Study 2 in two ways. First, it was explained and emphasised that help-seeking is a way to learn and

to improve ones' skills. It may have been the case that this focus on normativity meant that help-seeking was perceived by participants as possessing little or no threat. Help-seeking was not actively discouraged in the present study, but not actively encouraged either. Apart from telling participants they may seek as much or as little help as they wish, no specific instructions or information about help-seeking were provided. This should mean that help-seeking was not seen as an inherent threat, but it should not have been perceived as being entirely normative and recommended either.

Second, help-seeking was presented as normative in Study 2 by introducing the (ostensible) potential helpers as the male researchers who devised the anagrams. This implied that these men had task-related expertise and occupied a help-giving role: their primary job during the study was to help participants with the anagrams. As has been discussed previously, receiving help from 'experts', or people whose socially-defined role is to help others (e.g., fire-fighters and doctors) is generally less threatening than receiving help from those possessing no such expertise or role (e.g., bystanders). In the present study, the single (ostensible) potential helper was presented as a fellow participant who was no different from the actual participants (except for being English). In the new design the potential helper therefore occupied no specific helping role, nor possessed any kind of pre-existing duty to help. Again, it was hoped this would reduce the perceived normativity of help-seeking behaviour.

iv) Conceptualisations of the Audience and the Helper

Questions were raised in Study 2 regarding how participants conceptualised both the audience (i.e., the experimenter) and the potential helpers. In Study 2 (as was also the case in the present study), the experimenter could potentially be categorised as an ingroup member (as a woman in Study 2 and as a Scot in the present study). Since participants knew the experimenter had access to their consultation forms, their

behaviour could have been affected by the fact they knew that an ingroup member (in addition to the outgroup helpers) was witnessing their help-seeking behaviour. In the present study, this issue was tackled directly, by asking participants about the extent to which they felt concerned that the experimenter looked at their consultation form during the experiment.

To be clearer about exactly how participants conceptualised the outgroup helper (and the helping transaction) in the present study, a number of items enquiring about the extent to which participants perceived the helper as an outgroup member and themselves as ingroup members were included. Although answering these items undoubtedly required a high level of reflexivity (especially since the categorisation processes may have been less than fully conscious), it is useful to investigate how participants answer such items. For instance, it would be expected that participants in the Meta-Stereotype Salient condition who perceived the interaction in strongly intergroup terms (rather than interpersonal terms) would be particularly reluctant to seek high levels of help, since doing so would (in their eyes) help to confirm the Scots' handout-dependency in the presence of the English partner.

v) The Task

The anagram task was selected in Study 2 because it was deemed to be gender-neutral, so that, unlike mathematical or spatial tasks, it would not activate feelings of stereotype threat (e.g., McGlone & Aronson, 2006; Spencer et al., 1999). However, solving anagrams is unlikely to be perceived as a particularly engaging or interesting task. Indeed, many participants appeared to be quite hesitant about engaging in the task when the study was explained to them. Furthermore, if participants believed that anagram-solving abilities are linked to academic achievement (as had been suggested), they may have felt their performance on the

task was at least partly indicative of their IQ. Since IQ is a very personal and individualistic trait (and no links were made between IQ and gender in Study 2), participants may have been thinking about themselves in more individualistic terms (rather than in terms of their status as ingroup members).

With these issues in mind, the present study involved a more interesting, light-hearted and non-IQ-related task. Participants were asked to listen to a short sound-file of a 'whodunit' crime story (involving a kidnapping), before answering recall questions and attempting to deduce the kidnapper's identity. Some of the recall questions were unanswerable, to ensure participants would have reason to seek help (these items replaced the *difficult* and *very difficult* anagrams in Study 2). This task was adapted from Nadler, Shapira and Ben-Itzhak (1982).

Method

Participants and Design

Scottish undergraduates ($N = 67$) were assigned randomly to the three between-groups experimental conditions (Interpersonal condition $N = 21$, Intergroup condition $N = 22$ and Meta-Stereotype Salient condition $N = 24$). A two-study cover story was used to achieve this without participants becoming aware of the study's true purpose. As in Study 2, the 'first' study contained the experimental manipulations, while the 'second' contained the measures. To reduce complexities surrounding gender roles and helping (e.g., Eagly & Crowley, 1986), only females were recruited.¹

¹ This 'female-only' criterion was applied to the rest of the studies in this thesis, regardless of the nature of the salient identity. This decision was made due to the large number of studies suggesting that men and women tend to behave differently in terms of help-seeking behaviour, and that this is most likely due to the gender norms and gender roles which males and females attempt to adhere to (e.g., Eagly & Crowley, 1986; Good & Wood, 1995; Rudman & Glick, 2001). Since gender is a chronically salient identity for many people, it might be possible that participants would be influenced by their gender identity as well as by their Scottish identity in the present study. Therefore, to reduce the

Participants were recruited through an online course credit scheme, and were therefore never made aware that they were required to be Scottish (or female) to participate in the study, thereby reducing the chance of participants experiencing any kind of group identity salience before the manipulations. Additionally, only native English speakers were recruited for the study, to ensure participants would be able to understand the crime mystery task without difficulty. One participant (in the Intergroup condition) mentioned explicitly that she felt the two studies were connected, so she was removed from the analysis, in case her insight into the study's design affected her responses. Additionally, when asked to note down what they felt the aim of the study to be, 10 participants stated they believed the aim was to examine the link between nationality and help-seeking (four in the Interpersonal condition, one in the Intergroup condition and five in the Meta-Stereotype Salient condition). These participants were also removed from the analysis, in case their insight into the aim of the study affected their responses. This left 56 participants (Interpersonal condition $N = 17$, Intergroup condition $N = 20$ and Meta-Stereotype Salient condition $N = 19$; $M_{\text{age}} = 20.36$ years, $SD = 4.16$, age range = 17-37 years). Participants received either a small monetary payment or partial course credit.

Procedure and Measures

Participants were tested individually in a laboratory. The experimenter (a female Scottish Dundee University student) explained that participants would complete two short studies. The 'first' study was described as the experimenter's study, while the 'second' was apparently being run by the experimenter's PhD advisor (the experimenter explained she was helping her advisor by collecting data for

complexity of including potentially-conflicting gender norms in the studies, only females were recruited. Participants were not made aware of this fact however (so as to prevent their gender identity becoming salient).

him). This idea was reinforced by keeping the materials for the two ostensible studies in separate folders, with the latter folder having the advisor's name printed on the cover. In reality, both studies were connected.

Manipulations ('Study 1')

Trait-rating. In a manner similar to Study 2, the 'first' study was intended to manipulate the identity salience experienced by participants (depending on condition). In the Interpersonal condition, participants were told the study investigated the factors enhancing recall of traits used to describe people (thereby creating an interpersonal context). In the Meta-Stereotype Salient and Intergroup conditions, participants were told that the study investigated factors enhancing recall of English- and Scottish-related traits (thereby creating an intergroup context). In addition, Meta-Stereotype Salient condition participants received a meta-stereotype prime (i.e., they were asked to consider how the English viewed the Scots; see Appendix 4 for experimental materials).

These manipulations were delivered by presenting participants with a list of eight trait adjectives. Four were chosen to represent the handout-dependent stereotype that (some) English people apparently hold about the Scots (*freeloaders*, *loafers*, *handout-dependent* and *scroungers*). The other four traits were filler traits unrelated to helping or help-seeking (*clumsy*, *adventurous*, *friendly* and *creative*), which were not included in any analyses.

Interpersonal condition participants rated the extent to which they themselves possessed each of these eight traits (0 = *strongly disagree* and 4 = *strongly agree*). The dependency traits were combined to form a scale, ($M = 0.96$, $SD = 0.73$, *Cronbach's* $\alpha = .69$). Intergroup and Meta-Stereotype Salient condition participants completed the rating scale twice. First, Intergroup condition participants rated the

extent to which they attributed each trait to the outgroup (i.e., how much they themselves believed that the English possessed these traits; $M = 1.33$, $SD = 0.71$, *Cronbach's* $\alpha = .80$), and Meta-Stereotype Salient participants rated the extent to which the English attributed these traits to the Scots, ($M = 2.03$, $SD = 0.85$, *Cronbach's* $\alpha = .73$). Second, both Intergroup and Meta-Stereotype Salient condition participants rated the extent to which they believed that Scots possessed these traits (i.e., the auto-stereotype; overall $M = 1.17$, $SD = 0.73$, *Cronbach's* $\alpha = .77$).² The fact that these alphas are higher than those obtained from the trait rating task in Study 2 helps vindicate the choice of national identity (rather than gender identity) in the present study.

Text passage. Participants in all conditions were then told they would read a short text passage about descriptive traits before answering a few questions on what they had read (a task consistent with the apparent aim of the study). In reality, participants in the Intergroup and Interpersonal conditions received a different passage of text than participants in the Meta-Stereotype Salient condition (see Appendix 4 for the texts). The role of the Meta-Stereotype Salient condition text was to make the (somewhat novel) handout-dependency meta-stereotype maximally salient, and was adapted from Hopkins et al. (2007). In this condition, the passage described the results of a study ostensibly conducted at the participants' university, where English people were asked their opinions of the Scots. The overall message was that although the Scots are believed to possess some positive traits (*The English*

² Rather than only being asked to think about the traits possessed by the ingroup (as Intergroup condition participants in Study 2 were), Intergroup condition participants in the present study were first asked to think about the traits possessed by the English and then asked to think about the traits possessed by the Scots. This element was included in the present study because the way in which individuals conceptualise the ingroup is often coloured by and contrasted with how they conceptualise the outgroup (i.e., the meta-contrast principle, Turner et al., 1987). This has been found to be the case for the Scots (Hopkins et al., 1997). It was hoped that by asking participants to think about the outgroup and the ingroup (rather than just the ingroup, as they were in Study 2), a stronger intergroup context would be produced in the Intergroup condition.

respondents mentioned a number of positive attributes that they use to describe the Scots, including brave, patriotic and witty), they are generally perceived as handout-dependent (The negative adjectives most commonly attributed to the Scots were self-interested, handout-dependent and scroungers).

The passage in the Interpersonal and Intergroup conditions was not intended to perform a function (beyond ensuring that the three conditions were consistent in terms of the tasks participants were asked to carry out). To this end, the text in these conditions was of comparable length to the text in the Meta-Stereotype Salient condition, but was nationally-neutral and did not mention national meta-stereotypes.³ In these conditions, the passage described the results of an ostensible study investigating participants' opinions of the personal traits of individuals portrayed in television advertisements. The overall message was that participants responded more positively to individuals in advertisements possessing positive traits (rather than negative traits): *(One respondent explained that she “liked adverts that depicted people in a positive way – it just makes me feel so much more positive about the product.” Another interviewee agreed: “I hate adverts where people are depicted as lazy or stupid- I suppose it’s meant to be funny, but I’ve never understood that. Why would I buy something that is advertised by a stupid person?”).* This meant both texts contained reference to negative traits, so participants' mood should not have been differentially affected in the two conditions (and affect was measured to confirm

³ As mentioned previously, the role of this element of the design study was to make the meta-stereotype maximally salient in the Meta-Stereotype Salient condition, not to reinforce the intergroup context in the Intergroup condition (the rating-scale task described next was used to achieve this). This meant that both Intergroup and Interpersonal condition participants (neither of whom were exposed to the meta-stereotype) could receive the same text, which contained no reference to nationalities or nationality-related meta-stereotypes.

this).⁴ Participants were then presented with two recall questions (regardless of condition) in order to maintain the cover-story and to check their comprehension.

Measures ('Study 2')

After completing the 'first' study, participants were told about the 'second' study, apparently run by the experimenter's PhD. advisor. It was explained that the advisor was investigating behaviour during problem solving activities, particularly in scenarios where participants have to work together. Participants were told they would be partnered with another student in a neighbouring room (who did not actually exist), and that both would attempt to complete a mystery-solving task on their own. It was also explained the partners could seek as much or as little help on the task from each other as they wished. Requests for help were to be made on special consultation forms, which would be swapped.⁵ The partners would then ostensibly meet face-to-face for a brief session, where they would discuss their evaluations of the problem solving task (this never actually occurred, but telling participants that such a meeting would take place was intended to enhance their feelings of being judged).⁶

Introducing the partner. Participants were then asked to complete a brief information form, where they included some basic biographical information, including where they were born and grew up. This form was then ostensibly taken by

⁴ A pilot-study was carried out with post-graduates ($N = 5$), where the two texts were presented to the participants in a counter-balanced order and the participants' feelings of negativity towards each text were measured. This indicated that the two texts were perceived in equally positive terms on a 0-4 scale (Experimental text: $M = 2.90$, $SD = 0.52$, Control text: $M = 2.90$, $SD = 0.45$).

⁵ The reason for using this method (instead of showing participants a photograph of the potential helper) was that a photograph might have inadvertently helped to make gender identity salient.

⁶ Nadler (1980) noted the importance of making participants believe that they will later be meeting with their potential helper/s, since this creates a more intense appreciation and awareness of how the potential helper might perceive the help-seeking behaviour. Furthermore, Vorauer et al. (2000) noted that meta-stereotypes are most likely to become activated when a member of the (stereotyped) ingroup anticipates meeting with a member of the (stereotyping) outgroup, since such a scenario fosters feelings of evaluation apprehension, and creates a desire to know what the outgroup thinks about the ingroup. It was hoped that this element of the study should therefore intensify the manipulation in the key Meta-Stereotype Salient condition.

the experimenter to the partner next-door, and swapped with the partner's form, so the partners could learn more about each other. The partner's information form was hand-written (by the experimenter), and explained that the partner had been born in London, grew up in Manchester, and had come to this (Scottish) university because some of the partner's friends from Manchester were also studying here. The partner was therefore clearly English. Their sex was never revealed, in order to avoid gender effects. Participants were given a moment to read their partner's information form.

Mystery task. Participants then listened to an audio file of a three-minute long crime mystery story, read by a male with a Welsh accent (i.e., neither ingroup or outgroup in nature).⁷

After listening to the mystery, participants were given a question booklet, containing seven recall questions relating to what they had just heard (e.g., *What was the name of the person who was kidnapped?*), as well as a final question enquiring about the mystery solution. It was explained that answering the recall questions would help them solve the mystery. Participants were given two minutes to attempt these questions. So that participants could not answer all the questions (ensuring a need for help), four of the questions were unanswerable from the information provided. Nonetheless, Nadler, Shapira and Ben-Itzhak (1982) found that asking participants to listen to a quickly-read detail-filled story made it unlikely that this would be noticed.

Consultation form. After two minutes had elapsed, participants were presented with a consultation form, in which they were asked to indicate how much assistance they would like from their partner on each of the seven mystery recall questions. For each question, participants could choose from one of four levels of assistance (*none, a small hint, a large hint and a full answer*). This constituted the main Dependent

⁷ A pilot study with postgraduates ($N = 5$) indicated that the task was perceived as difficult to complete ($0 = \text{very difficult}$ and $4 = \text{very easy}$; $M = 0.80$, $SD = 0.45$) but easy to understand ($0 = \text{very difficult}$ and $4 = \text{very easy}$; $M = 3.00$, $SD = 1.23$).

Variable. The final question (asking about the solution to the mystery) was only used to maintain the cover story: help-seeking was not measured for this item.

Interpreting 'help seeking'. As was the case in Study 2, rather than using 'raw' help-seeking scores in the analysis, participants' help-seeking behaviour was interpreted. As before, this enabled appreciation of the fact that not all decisions made by participants to accept *no help* indicated a strategic refusal to be assisted on a particular item. If a participant answered an item correctly, then they would not have accepted any help on that item. This is not evidence of refusal to seek help; it is simply a logical and practical decision made by the participant, who seems likely to have decided there was little point in seeking help on an item they could answer themselves.

Interpretation was a relatively easy task in Study 2, because there was no ambiguity over the correct answer for each anagram: participants could either solve an anagram or they left it blank. However, this was not the case in the present study. Interpretation was complicated by the fact that participants were not provided with enough information in the audio file to answer all the mystery questions (although they were not made aware of this fact). This created ambiguity regarding how to interpret participants' responses when they refused to seek help on an item. For instance, when a participant sought *no help* on an unanswerable item, this could be interpreted as: i) the participant being aware that the item was unanswerable, and thus deciding to leave the item blank and not to bother seeking help (since their fellow partner would not have been able to answer this item either); or ii) the participant not being aware that the item was unanswerable, but believing that they themselves were simply not able to answer it, and thus deciding to leave the item blank and not to seek help (since they did not want to reinforce an image of dependency). While the former

possibility does not constitute a strategic refusal of help (since it would be a practical response to an unanswerable question), the latter possibility involves strategic elements. By being unsure about participants' motivations for seeking *no help* in the present study, interpretation became a more complex process.

To afford a strict test of the hypotheses, the more conservative (i.e., non-strategic) interpretation was adopted. However, since the nature of the mystery task raised other ambiguities regarding the interpretation of help-seeking responses, a number of criteria were devised to aid the interpretation process. Although there are numerous ways in which the help-seeking patterns could be interpreted, the following criteria were used:

1. If the participant answered a question but still *sought help* on that item, it was assumed that they thought their answer was either wrong or that they were merely guessing (even if, in reality, they were correct). These items were counted as part of the help-seeking index.
2. If the participant answered a question (regardless of whether the answer was right or wrong) and then *sought no help* on that item, it was assumed that they thought their answer was correct (and thus they did not feel the need to seek help). The item was thus not counted as a refusal of help.
3. If the participant claimed that an item was unanswerable, and then *sought help* on it, that item was marked as being left blank by the participant, since the participant presumably thought it was possible for their (ostensible) partner to know the answer, but that they themselves did not. These items were counted as part of the help-seeking index.
4. If the participant claimed an item was unanswerable, and then *sought no help* on it, that item was marked as being answered correctly (i.e., correctly identified

as being unanswerable), since the participant was assumed to have reasoned that there was no need to seek help on an unanswerable question. These items were not counted as a refusal of help (see point i in section above on interpreting help-refusals).

Applying these criteria enabled a strict test of the hypotheses, since the only situations in which participants were deemed to actively *refuse* help were cases where a participant left an answer to a question blank, but refused to seek help on that item. This was taken to indicate that the participant did not believe the question to be inherently unanswerable, but that they were unable to answer it, and still refused to request assistance.

Evaluation form. Before the consultation forms would ostensibly be swapped between partners, participants were asked to complete a questionnaire which supposedly analysed their experiences of the help-seeking task. In reality, the questionnaire contained various items (identical across-conditions) that aimed to measure potential mediating and moderating variables.

Participants were asked how willing they were to help their partner on the mystery recall questions (they were expecting to provide help to their partner after completing the evaluation form), (0 = *very unwilling* and 4 = *very willing*; $M = 3.86$, $SD = 0.35$).

Participants' affect was measured using two 0-4 bipolar scales: *negative-positive* and *bad-good*. These items were combined to create a positive affect scale ($M = 2.57$, $SD = 0.86$, $r = .69$, $p < .001$).

To measure perceived meta-stereotype unfairness, participants were presented with three dependency traits (*dependent*, *sponger* and *freeloader*), along with three positive filler traits (*reliable*, *tactful* and *caring*), and were asked to rate how unfair it would be if they themselves were described in terms of each of these traits (0 = *very*

unfair and 4 = *very fair*). The values for the dependency items were reversed and combined to form a scale ($M = 2.72$, $SD = 0.68$, *Cronbach's* $\alpha = .45$). Since the scale had such a low alpha, the '*dependency*' trait was removed, leaving only '*freeloader*' and '*sponger*'. This produced a more reliable scale ($M = 3.34$, $SD = 0.79$, $r = .68$, $p < .001$).

Participants were also asked to think about themselves as individuals and in terms of the groups to which they belonged. Participants listed up to five things that first came to mind when they read the sentence: *When I asked my partner for help, I saw myself as a/an:...* Participants were also asked to think about their partner as an individual and in terms of the groups to which their partner belongs, and were then asked to list their first five thoughts regarding how they perceived their partner.

To investigate their perceptions of the experimental situation, participants were asked to think about the help-seeking episode, and to rate how they had acted (0 = *completely as an individual* and 4 = *completely as a Scot*; $M = 0.87$, $SD = 0.96$). Using the same scale, participants also rated how they felt their partner evaluated them ($M = 0.98$, $SD = 1.06$). Participants also rated their agreement with the idea that they and their partner interacted as members of different national groups (0 = *disagree strongly*, 4 = *agree strongly*; $M = 0.75$, $SD = 1.05$), and, using the same scale, also rated their agreement with the idea that they and their partner interacted as unique individuals ($M = 3.04$, $SD = 1.04$). Since the ostensible partner was presented as a student (a potentially salient alternative identity), participants were also asked to indicate the extent to which they interacted with their partner as a fellow student (0 = *never* and 3 = *the whole time*; $M = 1.55$, $SD = 1.19$). Since these five variables measured somewhat different concepts, they were analysed separately.

To measure perceptions of help-seeking, participants were asked to indicate their agreement with a number of items that investigated the meanings they attached to help-seeking in the current context. Participants were asked to rate the extent to which they felt their image as a Scot was at stake during the experiment, the extent to which they felt seeking help would damage their reputation as a Scot, and the extent to which they felt they were competing with their partner as a Scot (0 = *never* and 3 = *the whole time*). These three items were combined into a ‘negative perceptions of help-seeking’ scale ($M = 0.17$, $SD = 0.34$, *Cronbach’s* $\alpha = .62$).

Participants completed four national identification items taken from Hopkins et al. (2007), (e.g., *This national identity is very important to me*; 0 = *disagree strongly* and 4 = *agree strongly*). The relevant items were reversed and combined with the others to form a scale, ($M = 2.97$, $SD = 0.82$, *Cronbach’s* $\alpha = .78$).

Collective self-esteem was also measured, by asking participants to rate their agreement with the four items from Luhtanen and Crocker’s (1992) public self-esteem sub-scale of their collective self esteem scale (e.g., *Overall, my national group is considered good by others*; 0 = *disagree strongly* and 4 = *agree strongly*). This sub-scale relates to how positively participants believe their ingroup is perceived by outgroups, so essentially involves consideration of group-related meta-perceptions. These items were combined to form a scale, ($M = 2.70$, $SD = 0.69$, *Cronbach’s* $\alpha = .76$).

Intergroup status disparities were measured with a single item adopted from Weber, Mummendey and Waldzus (2002). Participants were presented with a horizontal row of seven squares, which were labelled from 0 (*lowest status*) on the far left to 6 (*highest status*) on the far right, and were asked to write ‘Scotland’ in the square that they believed to signify Scotland’s status, and to write ‘England’ in the

square that they believed to signify England's status. Participants were allowed to write both words in the same square if they wished. Perceived status disparity was calculated by counting the number of lines (square sides) between the 'Scotland' and 'England' labels. A positive value thus indicates that Scotland was perceived to possess a higher status than England, while a negative value indicates that England was perceived to possess a higher status than Scotland, ($M = -0.55$, $SD = 1.21$).

Intergroup differentiation was measured by asking participants to indicate the extent to which both the Scots and the English possess a number of positive and negative traits (*kind, selfish, arrogant, friendly, hostile and sociable*), (0 = *not at all* and 4 = *a lot*). The negative items were reversed and then combined with the positive items to create a positive traits scale for the ingroup, ($M = 2.45$, $SD = 0.56$, *Cronbach's* $\alpha = .76$) and for the outgroup, ($M = 2.76$, $SD = 0.55$, *Cronbach's* $\alpha = .76$).

Participants used single-items scales to rate the extent to which the English believe the Scots possess the key stereotype of handout-dependency (0 = *disagree strongly* and 4 = *agree strongly*; $M = 2.04$, $SD = 1.09$), as well as the extent to which they agreed that this perception is unfair ($M = 2.91$, $SD = 1.02$). Participants also completed these two items for three other (filler) stereotypes (*primitive, miserly and gloomy*).⁸

Participants were presented with a single item to examine their concerns regarding the experimenter being an audience to their help-seeking (*During the study, how concerned were you that the experimenter might read your help-seeking consultation form?*; 0 = *not at all* and 3 = *a lot*; $M = 0.45$, $SD = 0.69$).

Finally, participants were asked to indicate what they felt to be the purpose of the study, and were then debriefed and compensated.

⁸ These filler items were selected from other common stereotypes of the Scots (*The Scots: Stereotype and Reality*, n.d.).

Results

Meta-Stereotype Endorsement vs. Auto-Stereotype Endorsement

Participants in the Meta-Stereotype Salient condition indicated that the English perceived the Scots as significantly more handout-dependent⁹ ($M = 2.03$, $SD = 0.85$) than they themselves did ($M = 0.95$, $SD = 0.66$; $t(18) = 7.05$, $p < .001$, $d = 1.68$, see Table 11). This suggests participants believed in the existence of the stereotype (i.e., that the English possess an image of the Scots that the Scots themselves do not possess).

Manipulation Check

To test the effectiveness of the experimental manipulations, participants' perceptions of Scottish handout dependency were compared between-condition. A one-tailed (prediction-based) t -test revealed that participants in the Meta-Stereotype Salient condition rated the Scots as significantly less handout-dependent ($M = 0.95$, $SD = 0.66$) than participants in the Intergroup condition ($M = 1.38$, $SD = 0.74$; $t(37) = 1.90$, $p = .03$, $d = -0.61$, see Table 13). This suggests that meta-stereotype challenging motivations were more apparent in the Meta-Stereotype Salient condition than the Intergroup condition: Meta-Stereotype Salient participants reacted to the meta-stereotype by emphasizing how *inapplicable* these traits are to Scots (i.e., that the Scots are not *handout-dependent*, *scroungers*, *loafers* or *freeloaders*). These findings suggest that the meta-stereotype manipulation was successful. Individual means for each of the handout-dependent traits can be found in Tables 11, 12 and 13.

⁹ *Handout-dependent* refers to the combined valued of all four handout-dependency-related traits, not just the single *handout-dependent* trait.

Table 11.

The means and standard deviations for each of the handout-dependency-related traits, examined within the Meta-Stereotype Salient condition.

Meta-Stereotype Salient Condition				
Traits (all 0-4 scales)	How much <u>English</u> agree traits apply to <u>Scots</u>		How much <u>participants</u> agree traits apply to <u>Scots</u>	
	M	SD	M	SD
Freeloader	1.84	1.07	0.63	0.68
Loafer	1.89	0.88	0.84	0.83
Handout-dependent	2.26	1.28	1.37	1.21
Scrounger	2.11	1.33	0.95	0.85
<u>Overall</u>	2.03 ^{***}	0.85	0.95 ^{***}	0.66

*** = $p < .001$ (two-tailed)

Table 12.

The means and standard deviations for each of the handout-dependency-related traits, examined within the Intergroup condition.

Intergroup Condition				
Traits (all 0-4 scales)	How much <u>participants</u> agree traits apply to <u>Scots</u>		How much <u>participants</u> agree traits apply to <u>English</u>	
	M	SD	M	SD
Freeloader	1.10	1.02	1.00	0.86
Loafer	1.55	0.83	1.65	0.93
Handout-dependent	1.50	0.89	1.30	0.92
Scrounger	1.35	0.99	1.35	0.88
<u>Overall</u>	1.38	0.74	1.33	0.71

Table 13.

The means and standard deviations for each of the handout-dependency-related traits, examined across the three conditions.

	M-S Condition How much participants agree traits apply to <u>Scots</u> .		Intergroup Condition How much participants agree traits apply to <u>Scots</u> .		Interpersonal Condition How much participants agree traits apply to <u>self</u> .	
	M	SD	M	SD	M	SD
Traits (all 0-4 scales)						
Freeloader	0.63	0.68	1.10	1.02	1.06	1.03
Loafer	0.84	0.83	1.55	0.83	0.88	0.86
Handout-dependent	1.37	1.21	1.50	0.89	1.24	1.30
Scrounger	0.95	0.85	1.35	0.99	0.65	0.79
<u>Overall</u>	0.95*	0.66	1.38*	0.74	0.96	0.73

* = $p = .03$ (one-tailed).

Preliminary Analyses

Affect

Since participants in the Meta-Stereotype Salient condition read a passage that differed from that read by participants in the Intergroup and Interpersonal conditions, affect levels were investigated to ensure that these different contents did not have different effects on participants' moods. Mood was not found to differ significantly between condition, ($F(2, 56) = 1.88, p = .16, \eta^2 = .07$; all post-hoc Gabriel analysis comparisons $p > .16$; Interpersonal $M = 2.88, SD = 0.94$, Intergroup $M = 2.35, SD = 0.80$, Meta-Stereotype Salient $M = 2.53, p = 0.79$).¹⁰

Percentage of Questions Unanswered

¹⁰ Post-hoc tests were selected for these analyses because no predictions were made regarding the effects of the experimental manipulations on affect levels. Furthermore (as in Study 2), Gabriel analyses were selected because there were slightly different N s in each of the conditions, and Field (2005) notes that the Gabriel test is particularly suitable in such circumstances. For interest, the analyses were repeated with the often-used Bonferroni corrected t -test post-hoc comparison, and these also revealed non-significant results.

A one-way ANOVA revealed that the percentage of mystery recall questions left unanswered did not differ significantly by condition, $F(2, 53) = 0.36, p = .70, \eta^2 = .01$, (Interpersonal condition: $M = 68.91, SD = 22.72$; Intergroup $M = 73.57, SD = 14.12$; Meta-Stereotype Salient $M = 69.93, SD = 16.42$). This suggests that any between-condition differences in help-seeking were due to the experimental manipulations, rather than participants in one condition finding the task more difficult.

Help-Seeking

Defining 'help-seeking'. Although the '*large hints plus full answers*' definition of help-seeking was used in Study 2, the nature of the task and the observed percentages of each level of help sought by participants in the present study implied that an alternative approach to analysing the data might be more suitable.

There are three reasons why participants in the present study were likely to seek higher levels of help than participants in Study 2. First, participants in the present study were presented with four recall questions that were unanswerable from the information provided. This was not the case in Study 2, where all anagrams were solvable. This difference meant that participants in the present study had no chance of solving the recall questions independently. Furthermore, since participants were unlikely to have any idea about the answers for many of these mystery recall items, *large hint*-seeking would likely be deemed ineffective. Instead, *full answer*-seeking was likely perceived as a more appropriate response.

Second, the nature of the task in the present study was somewhat different to the task in Study 2. Whereas the task in Study 2 involved participants attempting to attain a single goal (solving 10 anagrams), the task in the present study involved participants attempting to achieve a main goal (solving a mystery), which required

them to first achieve a sub-goal (answering the seven recall questions). Participants may have therefore felt that seeking high levels of help on the recall questions was acceptable, because such behaviour was a ‘stepping-stone’ to obtaining the correct solution to the mystery independently. This is very different to the anagram task in Study 2, where participants simply had to solve the anagrams.

Third, the crime-solving task placed less emphasis on personal competence than the anagram solving task, since while connections were made between anagram-solving abilities and competence in Study 2, no such connections were made between mystery-solving and personal competence in the present study.

Taking these observations together, it was expected that the present study would feature higher levels of help-seeking than Study 2. To investigate this idea, the percentages of participants’ responses classified as ‘help-seeking’ for each of the three potential help-seeking definitions (*small hints plus large hints plus full answers*; *large hints plus full answers*; and *full answers*) in the present study were compared with the equivalent percentages from Study 2 (see Tables 14 and 15; Table 14 is a replication of Table 6 from Study 2 for ease of reference).

Table 14.

The mean percentages (and standard deviations) of no help, small hints, large hints and full answers participants sought on anagrams they were unable to answer in STUDY 2, categorized into three potential definitions of ‘help-seeking’.

Definition	Overall		Interpersonal Condition		Intergroup Condition		M-S Condition	
	M	SD	M	SD	M	SD	M	SD
Small + Large + Full	96.45	16.90	100.00	0.00	90.26	29.37	98.29	6.26
Large + Full	62.79	32.76	70.52	27.93	52.67	34.78	63.69	34.56
Full	11.84	25.47	10.35	21.08	13.88	30.08	11.59	26.19

Table 15.

The mean percentages (and standard deviations) of no help, small hints, large hints and full answers participants sought on anagrams they were unable to answer in STUDY 3, categorized into three potential definitions of 'help-seeking'.

Definition	Overall		Interpersonal Condition		Intergroup Condition		M-S Condition	
	M	SD	M	SD	M	SD	M	SD
Small + Large + Full	99.26	3.98	97.55	7.07	100.00	0.00	100.00	0.00
Large + Full	75.59	22.33	78.28	21.24	72.57	24.89	76.37	21.24
Full	41.12	26.91	46.79	27.40	40.25	24.74	36.95	29.17

In support of the prediction that the present study would feature higher levels of help-seeking than Study 2, the data in Tables 14 and 15 reveal that participants were more willing to seek *full answers* ($M = 41.12$, $SD = 26.91$) in the present study than they were in Study 2 ($M = 11.84$, $SD = 25.47$; $t(126) = -6.29$, $p < .001$, $d = -1.12$).

This implies that participants perceived the general act of help-seeking as less costly in the present study than in Study 2, suggesting it would be logical to define 'help-seeking' as only the most costly request for assistance (*full answers*).

Further support for the decision to define 'help-seeking' as *full answers* is obtained from the fact that adopting the *large hints* plus *full answers* definition in the present study would risk a ceiling effect. This is because, for anagrams that could not be answered, over three-quarters of participants' responses (75.59%) would be counted as 'help-seeking'. Instead, adopting the *full answers* definition means that, for anagrams that could not be answered, 41.12% of participants' responses would be counted as 'help-seeking' (a value much further from ceiling).

Examining the standardized skew and kurtosis values for each of the three potential definitions of help-seeking in the present study provides additional support for the decision to define 'help-seeking' as *full answers*. As can be seen in Table 16,

the *full answers* definition provides the best distribution of the data: a conclusion confirmed by Figures 7, 8 and 9, which display the distribution of the help-seeking variable when help-seeking is defined as *small hints* plus *large hints* plus *full answers*; *large hints* plus *full answers*; and *full answers* respectively.

Table 16.

The standardized skew and kurtosis values for each of the three definitions of 'help-seeking'.

Help-Seeking definition	Overall (collapsing across conditions)	
	Skew	Kurtosis
	(standardized)	(standardized)
<i>Small + Large + Full</i>	-17.13	47.70
<i>Large + Full</i>	-1.68	-0.90
<i>Full</i>	1.44	-0.78

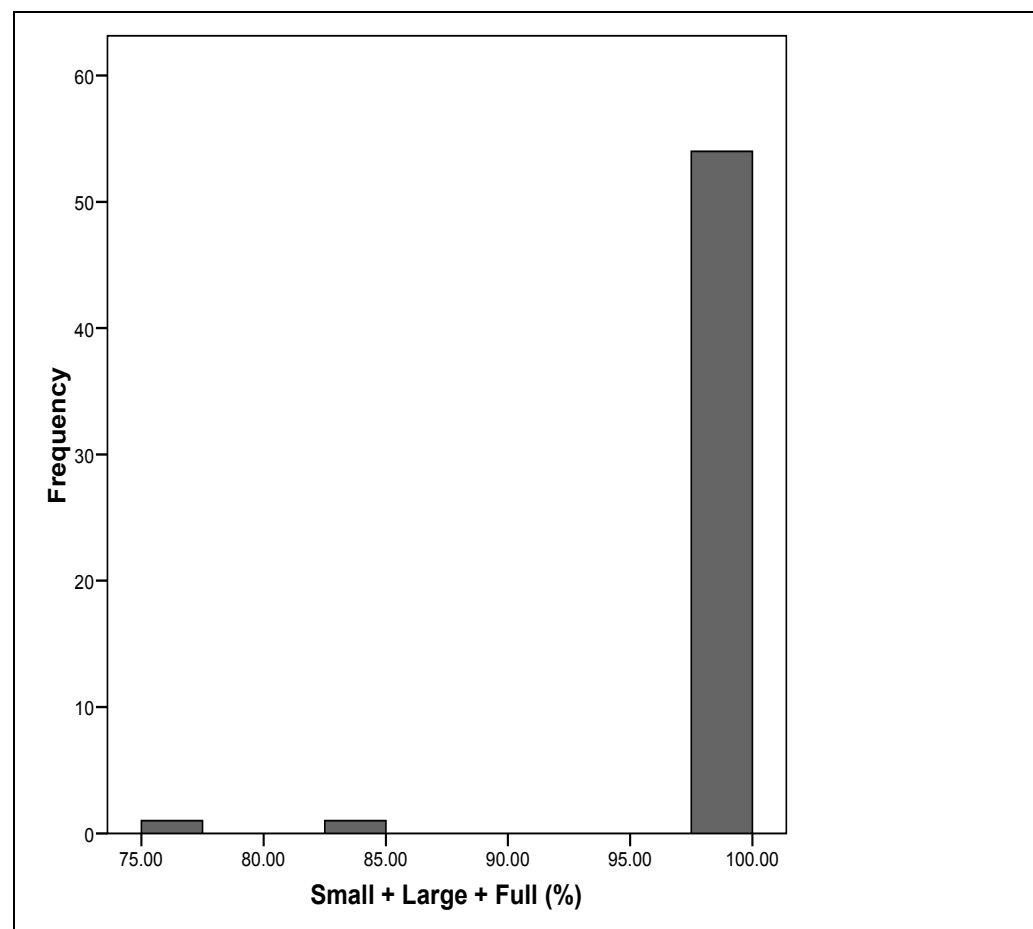


Figure 7. The distribution of the help-seeking variable when it is defined as *small hints* plus *large hints* plus *full answers*.

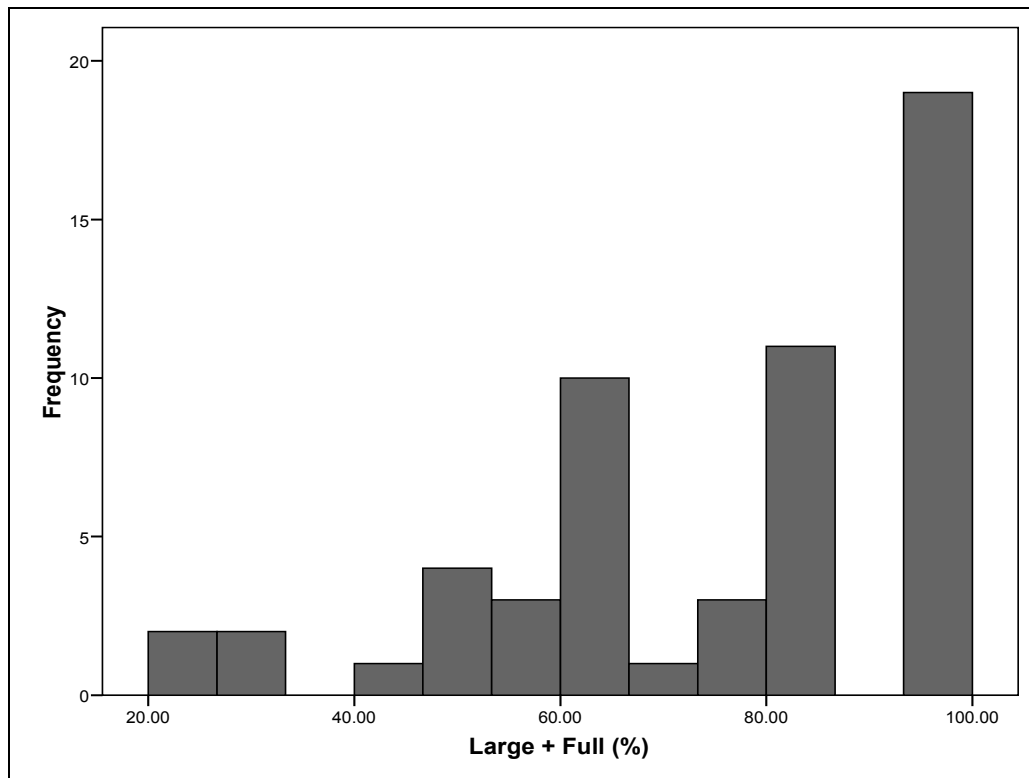


Figure 8. The distribution of the help-seeking variable when it is defined as *large hints* plus *full answers*.

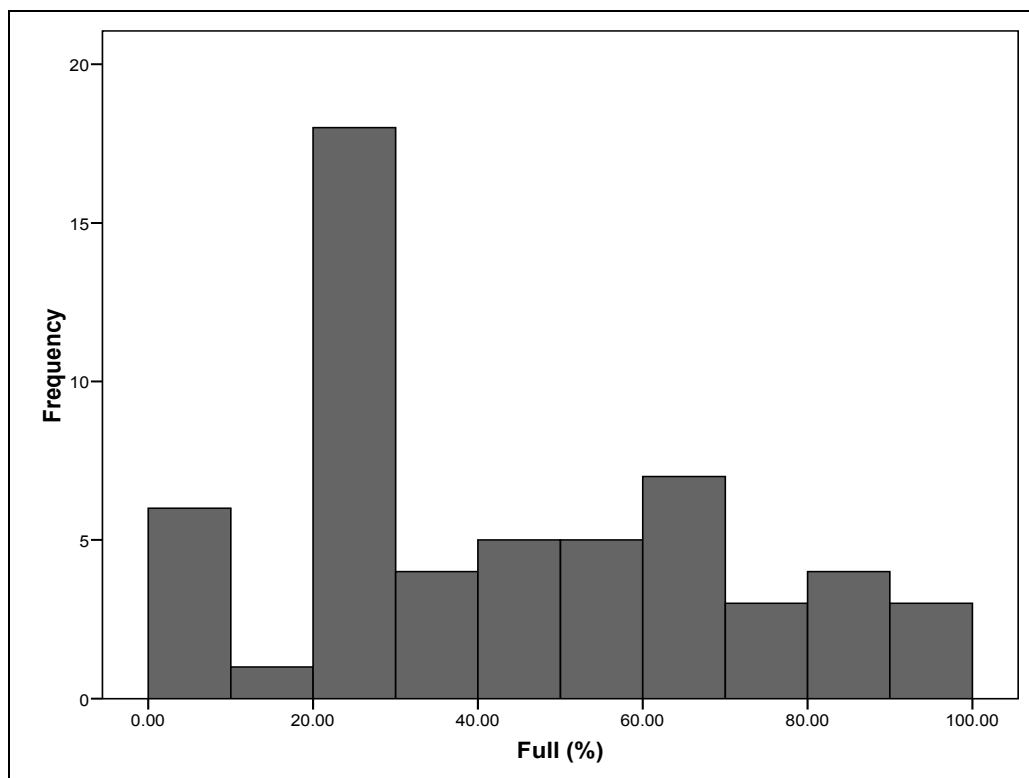


Figure 9. The distribution of the help-seeking variable when it is defined as *full answers*.

In light of these observations, ‘help-seeking’ in the present study was defined as *full answers*. Using this definition meant that 89.30% of participants were categorized as having sought help (regardless of the extent of that help, i.e., this means that 89.30% of participants sought at least one *full answer* on an item they could not answer).

Extent of help-seeking. The extent of help-seeking did not differ significantly by condition, $F(2, 53) = 0.61$, $p = .55$, $\eta^2 = .02$ (although all means were in the direction predicted: Interpersonal $M = 46.79$, $SD = 27.40$; Intergroup $M = 40.25$, $SD = 24.74$; Meta-Stereotype Salient $M = 36.95$, $SD = 29.17$).¹¹

Additional Variables

Table 17 summarises the between-condition means and standard deviations for the major variables. The most theoretically interesting of these variables will be discussed below. Participants’ perceptions of help-seeking, perceived intergroup status disparities, the measure of intergroup differentiation and the single item measuring the extent to which participants believed that the English perceived the Scots as handout-dependent (and the single item measuring the unfairness of this perception) did not differ significantly between-condition and added nothing to any of the analyses, so will not be discussed. No participant mentioned the partner’s nationality in the thought-listing task, so this questionnaire item will not be considered.

¹¹ The skew and kurtosis values of the key help-seeking measure were analysed by dividing the two values by their respective standard errors. The resultant values were then compared to Field’s (2005) critical values. When this analysis was carried out, the critical values for both skew ($z = 1.44$) and kurtosis ($z = -0.78$) were found to be non-significant (i.e., both $ps > .05$), indicating that the distribution of the help-seeking data was acceptable (as can be seen in Table 16).

Table 17.

Condition means and standard deviations for major variables.

Variables	Experimental Condition					
	Meta-stereotype M	SD	Intergroup M	SD	Interpersonal M	SD
Help-seeking (% full answers)	36.95	29.17	40.25	24.74	46.79	27.40
How willing is pt. to help their partner? ^b	3.95	0.23	3.85	0.37	3.76	0.44
Extent of pt. positive affect ^b	2.53	0.79	2.35	0.80	2.88	0.94
Extent to which pt. acted as a Scot ^b	0.83	0.92	0.70	0.80	1.12	1.17
Extent to which pt. evaluated as a Scot ^b	1.00	1.19	0.90	1.02	1.06	1.00
Extent pt. and partner interact as nations ^b	0.58	0.84	0.90	1.07	0.76	1.25
Extent pt. and partner unique individuals ^b	2.95	1.27	2.90	0.91	3.29	0.92
Extent pt. and partner interact as students ^a	1.68	1.20	1.50	1.10	1.47	1.33
Negative perceptions of help-seeking ^a	0.23	0.37	0.22	0.41	0.04	0.11
Scotland's status (vs. England) ¹²	-0.44	1.10	-0.65	1.27	-0.53	1.37
Identification (post- manipulation) ^b	2.71	0.78	3.11	0.80	3.10	0.85
Collective self esteem ^b	2.64	0.72	2.70	0.82	2.76	0.52
Extent of English positive traits ^b	2.83	0.60	2.83	0.53	2.61	0.51
Extent of Scots positive traits ^b	2.44	0.65	2.48	0.63	2.43	0.37
Extent English see Scots as dependent ^{b13}	2.26	1.10	1.89	1.15	1.94	1.03
Extent to which that is unfair ^b	2.68	1.11	3.16	0.84	2.88	1.11
Unfair if pt. seen as dependent ^{b14}	3.13	0.98	3.40	0.74	3.50	0.56
Worried looked at form ^a	0.42	0.77	0.42	0.61	0.53	0.71

^a = 0-3 scale, ^b = 0-4 scale, pt. = participant.¹² The more negative the value, the lower Scotland's relative status (compared to England).¹³ This value was based on a single item towards the end of the questionnaire, rather than the multiple-item result measured at the start of the questionnaire (which is discussed at the outset of this Results section).¹⁴ This scale combines the perceived unfairness of two traits: *sponger* and *freeloader*.

Level of Scottish Identification

Identification did not differ between-condition (Interpersonal $M = 3.10$, $SD = 0.85$, Intergroup $M = 3.11$, $SD = 0.80$, Meta-Stereotype Salient $M = 2.71$, $SD = 0.78$, $F(2, 53) = 1.50$, $p = .23$, $\eta^2 = .05$). However, Scottish identification in the present study was significantly higher than female identification in Study 2, $t(126) = -4.06$, $p < .001$, $d = -0.80$. Moreover, Scottish identification was negatively skewed ($z = -2.07$, $p < .05$), suggesting the majority of participants identified highly as Scots.

Perceived Meta-Stereotype Trait Unfairness

Participants' ratings for the perceived unfairness of the meta-stereotype-related traits (obtained by combining participants' ratings of the unfairness of being labelled as a *sponger* and as a *freeloader*) did not differ between-condition (Interpersonal condition $M = 3.50$, $SD = 0.56$; Intergroup $M = 3.40$, $SD = 0.74$; Meta-Stereotype Salient $M = 3.13$, $SD = 0.98$; $F(2, 53) = 1.03$, $p = .37$, $\eta^2 = .04$). Unlike Study 2, perceived trait unfairness did not act as a mediator of the effect of condition on help-seeking, but this is perhaps unsurprising, because perceived unfairness levels were significantly higher in the present study than in Study 2, $t(126) = -6.90$, $p < .001$, $d = -1.22$, and in the present study the perceived unfairness variable was very negatively skewed ($z = -4.99$, $p < .001$). These results indicate most participants in the present study perceived the meta-stereotype-related traits to be very unfair. This vindicates the choice of this identity and stereotype: although identification and judgements of unfairness were close to ceiling (limiting the possibility of obtaining evidence of the existence of mediation and moderation) these data show that the Scottish identity was identified with and the handout-dependency stereotype was reacted to.

Perceptions of the Experimenter

The extent to which participants were concerned that the experimenter may have looked at their consultation forms was low, and did not differ significantly between-condition (Meta-Stereotype Salient $M = 0.42$, $SD = 0.77$; Intergroup $M = 0.42$, $SD = 0.61$; Interpersonal condition: $M = 0.53$, $SD = 0.71$; $F(2, 52) = 0.14$, $p = .87$, $\eta^2 = .01$). This suggests the experimenter was not generally perceived to be an audience to the participants' help-seeking behaviour.

Analysis of Moderation

Analyses were carried out to determine whether the effect of experimental condition on help-seeking was moderated by participants' identification with the ingroup (with high ingroup identifiers being more affected by the experimental manipulations). No evidence was obtained to suggest that level of identification acted as a moderator, but since most participants identified very highly as Scots (and the identification variable was negatively skewed), this is unsurprising. However, it might be the case that a *situational measure of identity salience* (i.e., the extent to which participants thought about themselves as Scots during the study) could be more successful at revealing how individual differences moderated the effect of condition on help-seeking. Although a number of items were included in the present study which enquired about the extent to which participants felt as though they were engaging in the task in a group-related manner, it was felt that the most appropriate measure for the analysis would be the extent to which participants felt as though they acted as Scots during the study.¹⁵ Importantly, participants' scores on this item did not differ by condition, suggesting it measured individual differences (thus making it suitable to be used as a moderator; Interpersonal condition $M = 1.12$, $SD = 1.17$; Intergroup $M = 0.70$, $SD = 0.80$; Meta-Stereotype Salient condition $M = 0.83$, $SD =$

¹⁵ For interest, this item did not correlate with Scottish identification ($r = .10$, $N = 55$, $p = .47$).

0.92; $F(2, 52) = 0.88$, $p = .42$, $\eta^2 = .03$; all post-hoc comparisons $p > .47$). Moreover (and unlike the measure of identification), the *acting as a Scot* item was not significantly skewed ($z = 1.62$, $p > .05$). In light of these findings, the possibility of moderation was investigated using regression analyses (see Appendix 1 for statistical details).

Rationale

To test these predictions, two analyses were carried out (since moderation analysis can only compare two experimental conditions at once). First, the Interpersonal and Meta-Stereotype Salient conditions were compared, with the prediction that help-seeking would be significantly lower in the Meta-Stereotype Salient condition than in the Interpersonal condition, but only for individuals who perceived themselves as acting strongly as Scots. To show this effect was not simply due to the introduction of a salient intergroup context, the same analysis was then carried out to compare the Intergroup and Meta-Stereotype Salient conditions. Here, both conditions feature a salient intergroup context, but only the key experimental condition features a salient meta-stereotype. Obtaining the same effect in this second analysis will therefore suggest that, for individuals who acted strongly as Scots during the study, a salient meta-stereotype can encourage strategic help-seeking to a greater extent than a simple intergroup context.¹⁶

Interpersonal vs. Meta-Stereotype Salient

The data were found to meet the assumptions of regression analysis. After taking account of the variance explained by the standardized condition and the standardized *acting as a Scot* variables individually, the interaction between

¹⁶ Incidentally, the regression was non-significant when the Interpersonal and Intergroup conditions were compared, $R^2 = 0.08$, $\Delta R^2 = 0.09$; $F(1, 32) = 0.33$, $p = .57$, so will not be considered (although see Discussion).

standardized condition and the standardized *acting as a Scot* variable was found to predict help-seeking, $R^2 = 0.18$, $\Delta R^2 = 0.12$, $F(1, 30) = 4.36$, $p = .045$, indicating moderation.

Simple slopes. Using the simple slopes macro written by Preacher et al. (2003), the interaction was plotted at one standard deviation above ('high') and one standard deviation below ('low') the mean of the standardized *acting as a Scot* moderator. This plotting procedure revealed that the 'high' *acting as a Scot* slope was significant (*simple slope* = -16.59 $SE = 6.95$, $t = -2.39$, $p = .02$), indicating that, for participants who acted strongly as Scots, help-seeking was significantly lower in the Meta-Stereotype Salient condition than in the Interpersonal condition. Meanwhile, the 'low' *acting as a Scot* slope was non-significant (*simple slope* = 4.07, $SE = 6.82$, $t = 0.60$, $p = .55$; see Figure 10). These results indicate that participants in the Meta-Stereotype Salient condition sought less help than participants in the Interpersonal condition, but only if they perceived themselves to be acting as Scots.

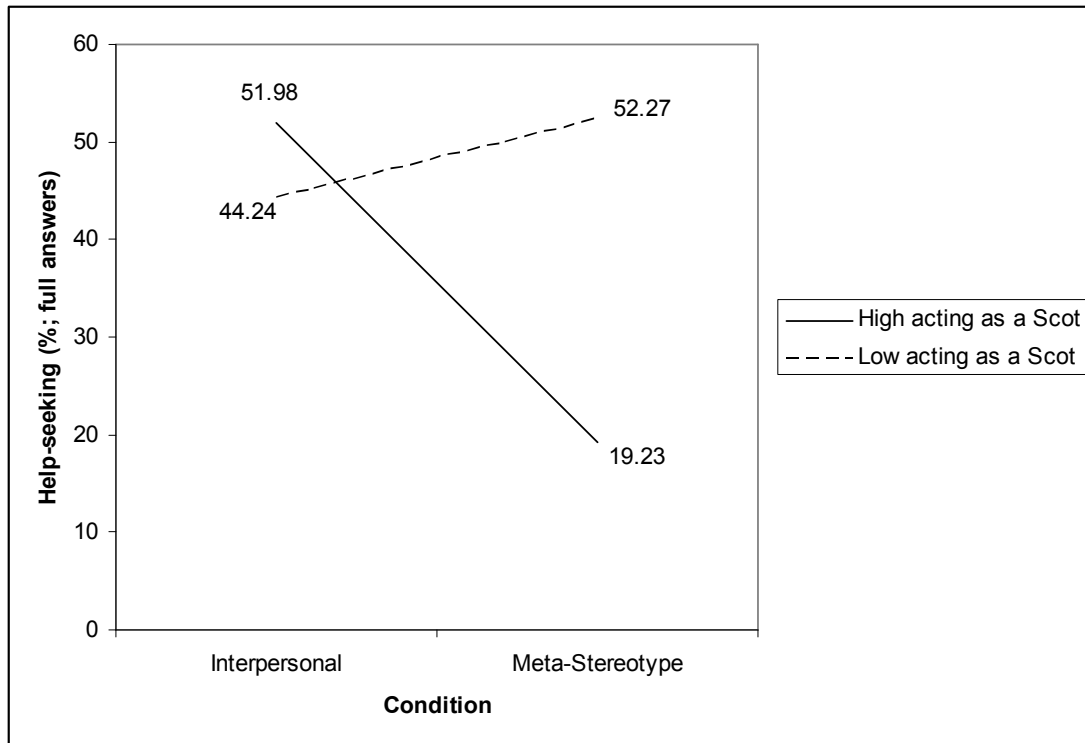


Figure 10. The moderating effect of the *acting as a Scot* variable on the relationship between experimental condition and help-seeking when the Interpersonal and Meta-Stereotype Salient conditions are compared.

To compare participants who acted strongly as Scots with those who acted weakly as Scots *within* each condition, the significant interaction was re-plotted (with *acting as a Scot* as the Independent Variable and condition as the moderator variable). This analysis revealed that, consistent with predictions, participants in the Meta-Stereotype Salient condition who acted strongly as Scots sought significantly *less* help than those who did not act as Scots, (*simple slope* = -16.52, *SE* = 7.57, *t* = -2.18, *p* = .04). Meanwhile, participants in the Interpersonal condition sought high levels of help regardless of the extent to which they acted as Scots (*simple slope* = 3.87, *SE* = 6.18, *t*

= 0.63, $p = .54$; see Figure 10). Since no social identity was made salient in the Interpersonal condition, this is consistent with predictions.¹⁷

After obtaining prediction-consistent findings regarding the Interpersonal and Meta-Stereotype Salient conditions (i.e., that help-seeking was significantly lower in the Meta-Stereotype Salient condition than in the Interpersonal condition, but only for individuals who acted strongly as Scots), the second moderation analysis involves comparing the Intergroup and Meta-Stereotype Salient conditions. This comparison is crucial because it would indicate that the effect of condition on help-seeking in the previous analysis (Interpersonal vs. Meta-Stereotype Salient) was not due simply to the introduction of a salient intergroup context. Specifically, if the effect described above in the Interpersonal vs. Meta-Stereotype Salient analysis is also observed when the Intergroup and Meta-Stereotype Salient conditions are compared (both of which involve a salient intergroup context), then evidence will be obtained to suggest a salient meta-stereotype can encourage strategic help-seeking to a greater extent than a simple intergroup context.

Intergroup vs. Meta-Stereotype Salient

The data were found to meet the assumptions of regression analysis. After taking account of the variance explained by the standardized condition and the standardized *acting as a Scot* variables individually, the interaction between standardized condition and the standardized *acting as a Scot* variable was found to be significant, $R^2 = 0.17$, $\Delta R^2 = 0.15$, $F(1, 34) = 6.15$, $p = .02$ (indicating moderation).

¹⁷ No cases were found to have standardized residuals that were more than two standard deviations from the regression line. Although one case was found to have a leverage value that exceeded the generally-accepted criterion of twice the average leverage value for the whole sample (Hoaglin & Welsch, 1978), this case did not exceed Stevens' (1992) more lenient criterion of three times the average leverage value for the sample. Based on these observations, it was concluded that no individual case had an unduly large effect on the regression analyses, and that the results could be interpreted legitimately.

Simple slopes. Using the simple slopes macro written by Preacher et al. (2003), the interaction was plotted at one standard deviation above ('high') and one standard deviation below ('low') the mean of the standardized *acting as a Scot* moderator. This plotting procedure revealed that the 'high' *acting as a Scot* slope was marginally significant (*simple slope* = -11.52, *SE* = 6.00, *t* = -1.92, *p* = .06). Help-seeking was significantly lower in the Meta-Stereotype Salient condition than in the Intergroup condition. Meanwhile, the 'low' *acting as a Scot* slope was non-significant (*simple slope* = 9.67, *SE* = 5.99, *t* = 1.62, *p* = .12; see Figure 11).¹⁸ These results indicate that participants in the Meta-Stereotype Salient condition sought less help than participants in the Intergroup condition, but only if they perceived themselves to be acting as Scots.

¹⁸ Meta-Stereotype Salient values differ between Figure 10 and Figure 11 because standardized values are affected by which conditions are included in the analysis.

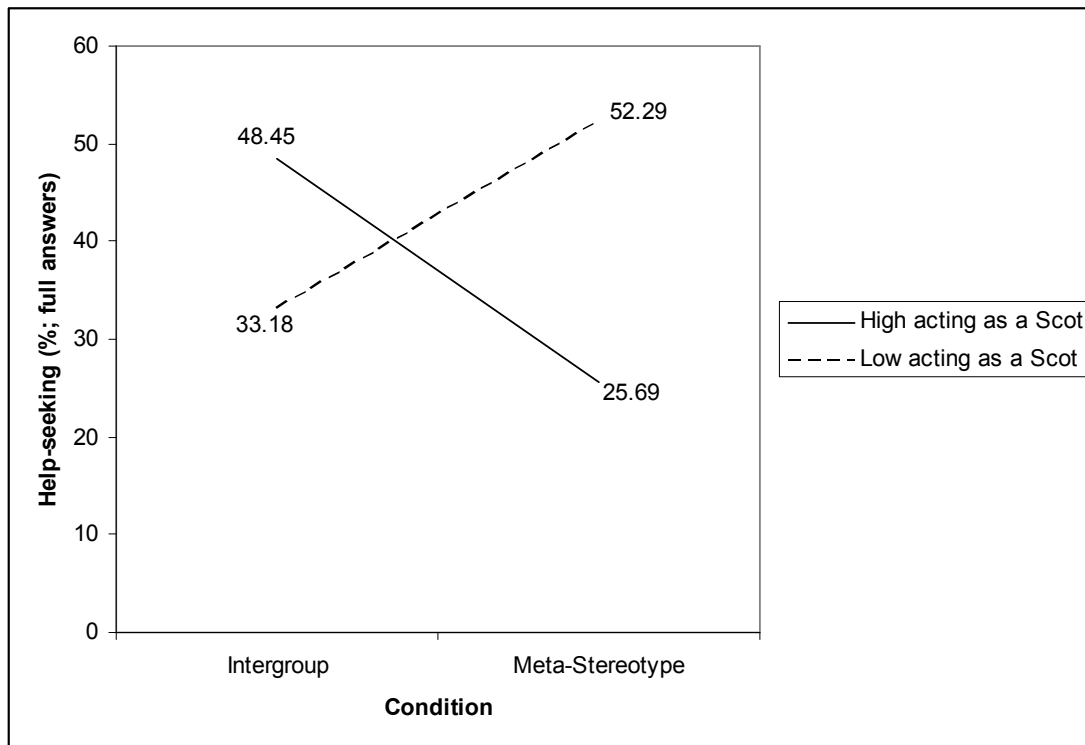


Figure 11. The moderating effect of the *acting as a Scot* variable on the relationship between experimental condition and help-seeking when the Intergroup and Meta-Stereotype Salient conditions are compared.

To compare participants who acted strongly as Scots with those who acted weakly as Scots *within* each condition, the significant interaction was re-plotted (with *acting as a Scot* as the Independent Variable and condition as the moderator variable). This analysis revealed that, consistent with predictions, participants in the Meta-Stereotype Salient condition who acted strongly as Scots sought significantly *less* help than those who did not act as Scots, (*simple slope* = -13.30, *SE* = 5.71, *t* = -2.33, *p* = .03). Meanwhile, participants in the Intergroup condition sought high levels of help regardless of the extent to which they acted as Scots, (*simple slope* = 7.64, *SE* = 6.22, *t* = 1.23, *p* = .23; see Figure 11).¹⁹

¹⁹ No cases were found to have standardized residuals that were more than two standard deviations from the regression line, and no cases had leverage values that exceeded the criterion of twice the

Discussion

The data obtained in the present study provide stronger support for the strategic receiving hypothesis than Study 2. This is likely due to the improved design of the present study: for example, using a highly-valued national identity helped prevent participants from distancing themselves from the threat to their group by defining themselves in terms of sub-groups. The fact that the Cronbach's alphas for the trait-rating scales were higher in the present study than Study 2 support this claim: participants appear to have had more coherent ideas about the nature and contents of Scottish identity (compared to the female identity), and more consistent understandings of how the ingroup is perceived by the key outgroup (the English). Furthermore, the results reveal participants believed the English to endorse the handout-dependency stereotype more than they themselves did, and participants who were encouraged to consider the contents of this meta-stereotype went on to *contest* Scots' handout-dependence in the trait rating task. This latter can be interpreted as a strategic attempt to challenge the stereotype (see Klein & Azzi, 2001), indicating this (partially-novel) stereotype was particularly suitable for use in the present study.

Help-Seeking

Meta-Stereotype Salient Condition

Most importantly, the help-seeking data show this motivation to contest the image of the Scots as handout-dependent translated into actual behaviour. While help-seeking levels were not found to differ significantly by condition (although the means were in the predicted direction), the relationship between condition and help-seeking was found to be moderated by the extent to which participants felt as though they

leverage value for the whole sample (Hoaglin & Welsh, 1978). It was therefore concluded that no individual case had an unduly large effect on the significant regression analyses, and that the results could be interpreted legitimately.

were acting as Scots during the experiment. There is therefore clear evidence supporting the prediction that, for those who acted as Scots during the experiment, being exposed to an image-threatening dependency-related meta-stereotype motivated strategic help-seeking avoidance. Moreover, the results enabled this effect to be isolated to the Meta-Stereotype Salient condition: the decline in help-seeking was not due simply to participants reflecting on definitions of ingroup identity (otherwise the Intergroup vs. Meta-Stereotype Salient analysis would have yielded non-significant results). A key contribution of the present study was thus to obtain a difference in help-seeking between the Meta-Stereotype Salient and Intergroup conditions, which represents a significant advance from Study 2 to the present study. It seems that a salient negative meta-stereotype evokes feelings of social image threat in a way that a simple intergroup context does not, and that participants who act strongly as ingroup members in the former situation are willing to forgo needed help in the interests of their group's social image.

Intergroup Condition

Turning to a different issue, it is not clear why the Intergroup/Interpersonal difference in help-seeking observed in Study 2 was not also observed in the present study: although participants sought less help in the Intergroup than Interpersonal condition in the present study, this difference was not significant (even when subjected to moderation analysis). It should be noted that attempts were made in the present study to create a stronger intergroup context than that evoked in the previous study: participants were asked to indicate the extent to which the outgroup (as well as the ingroup) possessed each of the descriptive traits (thereby creating a sense of meta-contrast). Nonetheless, it may be that the intergroup context in the present study was not sufficient to evoke group-related concerns strong enough to produce an

observable difference in help-seeking between the Intergroup and Interpersonal conditions.

One element of the design that may have weakened this intergroup context involves the trait-related text passage used in the Intergroup (and Interpersonal) conditions. This text did not contain any mention of an intergroup context (indeed, it was interpersonal in nature, since it focussed on the traits possessed by individuals depicted in advertisements). This text was intended to perform a filler function in the Intergroup and Interpersonal conditions (to enable equivalence with the Meta-Stereotype Salient condition, which featured a text that *was* group-related and was intended to enhance the salience of the meta-stereotype). Nonetheless, the interpersonal nature of this filler text may have diluted the strength of the intergroup context in the Intergroup condition. A more suitable design may have involved presenting Intergroup condition participants with a group-related text that made no reference to meta-stereotypes. This may have helped strengthen the intergroup context whilst avoiding meta-stereotype salience (although see Study 2 for discussion of the possibility that meta-stereotypes automatically become salient in intergroup contexts).

While the key result obtained in the Meta-Stereotype Salient condition of the present study is of central interest in this thesis (especially in terms of its comparison with the Intergroup condition), this finding would have been strengthened by showing that the Intergroup condition elicited more help-seeking avoidance from participants than the Interpersonal condition. Obtaining this latter result would indicate that the Intergroup condition involved a strongly-salient intergroup context (as intended), giving more weight to the key conclusion made regarding the Meta-Stereotype Salient condition vs. Intergroup condition comparison (i.e., that a salient meta-stereotype promotes strategic help-seeking in a way that a ‘purely’ intergroup context does not).

Nonetheless, the final study in this thesis will also involve investigating this important Intergroup vs. Meta-Stereotype Salient comparison, with the hope of obtaining additional evidence to support the present study's results.

Scottish Identification and Acting as a Scot

While the results of the conditional indirect effects analysis in Study 2 suggested that participants' Scottish identification was likely to be an important moderating variable in the present study, this was not found to be the case. The main reason for this was probably that all participants generally identified highly as Scots, leading to the identification measure being negatively skewed. This observation regarding Scottish participants' generally-high levels of ingroup identification has been noted by others (e.g., Hopkins et al., 2007), and creates a potential problem for researchers incorporating Scottish identity into their studies.

This empirical observation led to the investigation of a second potential moderator variable: the extent to which participants acted as Scots during the study. This variable was conceptualised as a measure of situational identity salience, because it relates to the extent to which participants thought about the experimental situation in Scottish-related terms. This variable was found to be independent of chronic identification, indicating that, regardless of participants' level of Scottish identification, there are individual differences in the extent to which they think of themselves as Scots (and thus act as Scots) in the specific experimental situation. This is perhaps unsurprising, since the experiment took place in an academic setting (a context which was likely to be highly familiar to participants). This means that participants will have brought their pre-existing knowledge, experiences and understandings into the laboratory with them, and that these elements had the potential to affect how they perceived the situation. For some, the situation will have

encouraged them to act as Scots, while this inclination will have been weaker for others. These observations suggest that the *acting as a Scot* variable was a particularly suitable moderator in this study, since it enabled participants' social identity-related individual differences to be revealed in a manner that was not permitted by the level of identification variable.

Moreover, the results from the moderation analyses are clear: those who thought of themselves as Scots during the study were particularly unwilling to seek help when a handout-dependency-related meta-stereotype was made salient. Furthermore, the within-condition simple slopes analyses revealed that comparing low and high levels of the *acting as a Scot* variable only produced a significant change in help-seeking behaviour in the Meta-Stereotype Salient condition: the observed differences in the Interpersonal and Intergroup conditions were both non-significant. These results therefore suggest that the Meta-Stereotype Salient condition created group-image-related concerns for these participants in a way that the Interpersonal and (importantly) the Intergroup condition did not: concerns reflected in participants' help-seeking behaviour.

Perceived Meta-Stereotype Trait Unfairness

Just as participants tended to identify highly with their Scottish identity, they also tended to perceive the handout-dependency-related traits as highly unfair (leading to the unfairness variable being very negatively skewed). This helps to explain why perceived meta-stereotype trait unfairness was an important mediating variable in Study 2, but was not found to play this role in the present study. In this regard, it is important to note the long-running rivalries between the Scots and English, which are likely to encourage almost all Scots to perceive English meta-stereotypes as highly unfair (e.g., Hopkins et al., 2007). As mentioned earlier, this finding helps vindicate

the choice of Scottish identity and handout-dependent meta-stereotype in the present study: as Hopkins et al. (2007) noted, meta-stereotypes are only likely to affect behaviour when they are regarded as unfair.

Extent of Help-Seeking and Choice of Task

Although steps were taken in the present study to attempt to reduce overall levels of help-seeking by conceptualising the behaviour as less normative than in Study 2, these attempts were eclipsed by the nature of the task upon which participants were able to seek help. The fact that four of the seven mystery-recall questions were unanswerable made seeking anything but *full answers* somewhat ineffective, and the nature of the task (answering recall questions to increase one's chance of solving the mystery independently) meant that seeking large amounts of help on the recall questions was likely to be perceived as more acceptable than seeking the same amounts of help on the anagram task in Study 2. This, coupled with the lack of connection made between the mystery task and personal competence, appears to have increased participants' *full answer*-seeking in the present study. In light of these observations, the definition of help-seeking was changed to incorporate only *full answers* (i.e., the most identity-threatening level of help-seeking). However, these results suggest that although the mystery task is likely to be perceived as more engaging than the anagram task, seeking help on the former task also appears to pose less of a threat to participants' group identity. With these issues in mind, the rest of the studies in this thesis involving behavioural measures of help-seeking feature the anagram task from Study 2.

Conceptualisation of the Helper

The nature of the potential helper was also altered in the present study, with the hope of reducing overall levels of help-seeking (i.e., the potential helper was

introduced as a fellow student, with no anagram-solving expertise and no pre-defined help-giving role, and participants were told they would meet the partner later to discuss the task they apparently both attempted). Undoubtedly, there are advantages to defining the potential helper as a fellow student, but there are also advantages to defining them as a researcher (e.g., it suggests that they possess high levels of status, which has the potential to increase identity-threat; there is no risk of the superordinate ‘fellow undergraduate student’ identity becoming salient; and it is relatively easy to weave ostensible researchers into a two-study cover-story set in a university). Due to the important advantages and merits outlined above (and since no evidence was obtained from the present study to suggest that introducing the potential helper as a fellow student constituted a significant design improvement), the rest of the studies in this thesis involve introducing the potential helpers as researchers.

Conceptualisation of the Audience

As hoped, participants appear to have perceived the English partner to be the key audience to their help-seeking behaviour: the finding that participants were generally unconcerned about the experimenter viewing their consultation form suggests they did not believe that the (ingroup) experimenter would look at their consultation form, and they therefore did not perceive her to be a relevant audience to their help-seeking behaviour. However, it is also possible to place an alternative analysis on these results: instead of assuming that the experimenter was not viewed as an audience because participants were not concerned about her seeing their consultation forms, it could also be the case that participants *did* believe that the experimenter would look at their consultation forms, but that they simply did not mind this (possibly because she was perceived as a fellow ingroup member). If this is the case, then the experimenter may still be seen as a secondary audience to the help-

seeking behaviour, which may have affected the results of the study. With this in mind, the rest of the studies in this thesis that employ behavioural measures are designed so as to ensure there is no possibility that the experimenter could view participants' consultation forms, thereby reducing the audience-related confusion that may arise from this type of experimental paradigm.

Conclusions and Future Directions

The present study represents a significant advance from Study 2 in terms of providing evidence to support the strategic help-seeking hypothesis. By showing that a salient dependency-related meta-stereotype can influence participants' help-seeking behaviour in a manner that moves beyond the effects of a salient intergroup context, the present study has helped to highlight the ways in which group members may attempt to challenge negative stereotypes of their group within the context of the helping transaction. With this key finding, the remaining studies in this thesis are intended to provide additional (and finer-grained) evidence of the strategic help-seeking phenomenon. While later studies involve a more in-depth investigation of the key concept of 'strategy' (and the different understandings that group members have of this concept in different contexts), the next study examines the strategic help-seeking hypothesis with reference to two specific issues: i) the nature of the meta-stereotype salience manipulation (and whether a more naturalistic manipulation can also obtain prediction-consistent results), and ii) the relevance of the group membership of the potential helper: an issue first highlighted in Study 1.

Chapter 10

Study 4: An investigation of intergroup and intragroup help-seeking in the context of a meta-stereotype made salient via naturalistic methods.

The studies reported thus far provide a range of evidence to support the strategic help-seeking hypothesis. Most importantly, data from the previous study suggest that making a meta-stereotype salient affects outgroup help-seeking behaviour (for those who perceived themselves to be acting as Scots during the experiment) in a way that an interpersonal or an intergroup context does not. This suggests that a salient dependency-related meta-stereotype has the potential to encourage group members to avoid seeking help in a situation where to do so would risk confirming this negative stereotype. As the relevance of meta-stereotype salience to strategic help-seeking behaviour has thus been established, the present study was designed with the intention of strengthening and extending this key finding by addressing two specific issues.

i) Methods for Making the Meta-Stereotype Salient

The first issue concerns the method used to make the meta-stereotype salient. Up to this point in this thesis, the meta-stereotype manipulations have involved asking participants to rate the ingroup (and how the outgroup perceives the ingroup) on a number of traits. Although this method appears to have been effective, it could be argued that it is not an entirely realistic representation of how meta-stereotypes become salient. In reality, stereotype salience occurs in more subtle and insidious ways: by the way people talk and interact (e.g., Lyons & Kashima, 2003). For these studies to possess an element of real-world applicability and generalizability, it is important to show that the expected results can be obtained through various methods,

including ones that might be deemed more ‘true-to-life’. To this end, a new method was devised for the present study. Inspired by the social-stereotyping work of Pendry (1998), whose manipulation involved participants overhearing an apparently real conversation between two people, participants in the present study overheard a fabricated telephone call during the study. The contents of this telephone call in the experimental condition were intended to encourage meta-stereotype salience in a naturalistic and subtle manner.

ii) The Relevance of the Helper’s Identity

The second issue examined in the present study is the relevance of the *helper’s* identity. Although not considered in depth, this issue was addressed in Study 1. The manipulations in Study 1 aimed to encourage participants to categorize themselves as women in the Gender condition and as Psychologists in the Psychologist condition (with the expectation that this would affect how the potential helper was perceived). However, this manipulation was confounded with meta-stereotype-relevancy (i.e., the meta-stereotype was only identity-relevant in the Gender condition, not in the Psychologist condition). Nonetheless, Study 1’s results hinted at an interesting conclusion: that while seeking help from someone perceived as outgroup can be threatening (an idea supported by Studies 2 and 3), so too can seeking help from someone perceived as ingroup. One of the aims of the present study was therefore to investigate the effect of the potential helper’s group membership in more depth, using an improved design, behavioural measures and an explicitly salient (and identity-relevant) dependency-related meta-stereotype.

Outgroup Threat

In general, social identity theorists would predict that seeking outgroup help should be perceived as more threatening than seeking ingroup help. This is because

such behaviour risks confirming the stereotype to the very group that espoused it. In turn, this means it would be more effective to deploy strategic receiving behaviour (by avoiding seeking help) in the presence of outgroup members than in the presence of ingroup members. Stereotype-challenging behaviour should be maximally effective when it is performed in the presence of those who made the accusation in the first place (Hopkins et al., 2007). It could therefore be predicted that ingroup members in an intergroup situation would be especially likely to avoid seeking help, with a view to disconfirming the outgroup's negative image of the ingroup.

Conversely, when the source of the help is ingroup, help-seeking should be; i) less guided by strategic social-image-protecting motivations, and ii) perceived in less threatening terms, since fellow ingroup members should be less likely to endorse these negative stereotypes of their own group in the first place. Seeking help from fellow ingroup members can therefore be perceived as being less 'risky' in social-image-related terms, since there is less chance of the participant's behaviour presenting the ingroup in a bad light to outgroup members. Moreover, individuals are often committed to supporting and assisting fellow ingroup members (e.g., Levine et al., 2005; Simon et al., 2000; Wakefield et al., in press). Being ingroup members themselves, participants are likely to be aware of this phenomenon and its implications (with the key implication being that they are likely to have a positive and satisfying experience if they engage in a helping-transaction with an ingroup member). This should mean that intragroup help-seeking in such contexts is viewed more positively than intergroup help-seeking.

Although they did not investigate help-seeking, this prediction is consistent with results obtained by Klein and Azzi (2001) regarding the strategic confirmation of meta-stereotypes. They found Belgian participants were motivated to describe their

ingroup in a manner that disconfirmed the negative aspects of the stereotype held by the French about the Belgians, but only when presenting themselves to an outgroup (i.e., French) audience. When presenting themselves to an ingroup (i.e., Belgian) audience, the effects disappeared. This finding again highlights the significance of the presence of an outgroup audience during attempts to challenge meta-stereotypes, and even suggests that it might be an important pre-requisite for strategic meta-stereotype challenging behaviour to occur. This conclusion is consistent with Vorauer et al.'s (2000) observation that meta-stereotyping is a strongly intergroup phenomenon, and meta-stereotypes therefore require an intergroup context before they can become salient.

Ingroup Threat

Yet, at the same time as evidence suggests that seeking outgroup help may be perceived as more costly than seeking ingroup help, there is also reason to be cautious regarding this prediction. Based on Study 1's tentative findings, it is possible that seeking *ingroup* help in the context of a salient dependency-related meta-stereotype could also be perceived as a threatening and costly activity (albeit for different reasons than those that may emerge in intergroup contexts). Specifically, it was the participants in Study 1 who perceived Mark as a highly typical ingroup member (i.e., a fellow Psychologist) who were *least* willing to seek his help. As suggested in Study 1's Discussion, this finding may relate to the fact that the act of help-seeking is often bound up with traits such as incompetence and dependence (Lee, 2002), and demonstrating these traits to a fellow ingroup member (particularly if that ingroup member is perceived as prototypical) risks the help-seeking group-member being perceived as peripheral. Specifically, by overtly confirming a negative stereotype that the outgroup is explicitly known to hold regarding the ingroup, the person has the

potential to be labelled a ‘bad’ group member by fellow ingroup members. Being perceived as deviant usually makes for a rather negative group membership experience: the Black Sheep Effect occurs when ingroup members judge ingroup deviants even more harshly than outgroup members who behave similarly, predominantly because the deviant ingroup member’s behaviour could jeopardise the group’s cohesion, as well as its image and reputation in intergroup contexts (e.g., Marques, 1990; Marques & Yzerbyt, 1988; Marques, Yzerbyt, & Leyens, 1988). This means that, far from being a source of support and comfort, receiving ingroup help in the context of a salient meta-stereotype could be perceived as the group member ‘letting the side down’ by behaving in a stereotype-confirming manner. This could lead to group members perceiving ingroup help-seeking as costly in personal-image terms.

Although it has not been studied directly in this context, it is conceivable that fear of ‘letting the side down’ when a negative dependency-related meta-stereotype is salient could discourage help-seeking in intragroup contexts. If this were the case, then the source of help should not affect participants’ behaviour: help-seeking levels should remain low in both ingroup-helper and outgroup-helper conditions (albeit for different reasons).

The Present Study

So far, no published work has compared participants’ intergroup and intragroup help-seeking in the context of a salient meta-stereotype, so it is not possible to untangle these conflicting predictions by referring to previous research. Although Klein and Azzi’s (2001) results speak to the significance of an outgroup audience, it is important to note that their research did not involve participants attempting to disconfirm a meta-stereotype through their behaviour: participants

simply completed a trait-rating task where they could indicate the traits they believed to be possessed by the Belgians. Although Hopkins et al. (2007) did incorporate behavioural measures into their help-giving research, they did not compare the effects of ingroup and outgroup audiences: they simply suggested that an outgroup audience was an important pre-requisite for strategic behaviour to occur. The effects of help-source on behaviourally-based stereotype-challenging strategies have thus not yet been investigated in depth (and have not been investigated at all in the context of strategic help-seeking behaviour). One of the aims of the present study was to address this omission in the literature by manipulating the group membership of the potential helper (Ingroup vs. Outgroup) in a study where participants' actual help-seeking behaviour was measured. This manipulation enabled the effect of the potential helper's perceived group membership to be investigated thoroughly, and allowed for the conflicting predictions outlined above to be investigated.

Operationalization of the Audience

Although the studies discussed above involve the idea of manipulating the *audience* to the participants' behaviour, the present study manipulated the nature of the potential *helpers* (since it was felt that introducing a third party with access to participants' help-seeking responses had the potential to confuse). Nonetheless, this manipulation can be seen as being comparable to an audience manipulation, since as well as providing help, the potential helpers were also apparently able to witness participants' help-seeking requests, and to connect those requests with their knowledge about the participants' group membership (e.g., see Nadler & Halabi, 2006).

Design and Predictions

Two variables were thus manipulated orthogonally in the present study: the nature of the meta-stereotype (Present vs. Absent) and the group membership of the potential helpers (Ingroup vs. Outgroup). The meta-stereotype manipulation was utilized with the intention of obtaining additional evidence to support the strategic help-seeking hypothesis (i.e., that making a dependency-related meta-stereotype salient using naturalistic methods reduces help-seeking). Furthermore, on the basis of the previous studies' results, it was predicted that this effect would be moderated by either identification level (i.e., meta-stereotype salience should reduce help-seeking, but only for high ingroup identifiers) or situational salience (i.e., meta-stereotype salience should reduce help-seeking, but only for those who think of themselves as ingroup members during the experiment).

However, it was also predicted that the effect of the meta-stereotype manipulation might interact with the group membership of the potential helpers. A salient dependency-related meta-stereotype may lead to lowest levels of help-seeking when the potential helper is conceptualised as an outgroup member (an effect which may be attenuated when the potential helper is conceptualised as a fellow ingroup member). However, since it may be the case that group members perceive ingroup and outgroup help-seeking as equally costly (meaning that Source of Help would have no effect), this was an exploratory element of the study.

Nonetheless, even if both intergroup and intragroup contexts promote low levels of help-seeking in the presence of a salient meta-stereotype, this outcome was predicted to occur for different reasons in the different contexts (see above). This should mean that (regardless of absolute help-seeking levels) participants' *experiences* of seeking help in the presence of a salient meta-stereotype should differ

depending on the help-source. A number of additional variables were measured to attempt to investigate these potentially differing experiences (see Method).

The Identity

The nature of the naturalistic method used in the present study required the meta-stereotype made salient to be well-known and well-understood by participants, so its contents could be accessed easily and quickly when they heard the telephone call. Furthermore, the stereotype had to be recognised instantly as unfair, so that, even in the context of the brief telephone-call, strategic motivations could be activated. Since the Scottish handout-dependency-related stereotype in the previous study was essentially devised and developed *during* the study (rather than emerging from long-held awareness and understanding), this stereotype was not deemed suitable for use in the present study. Instead, the female dependency-related meta-stereotype was considered more appropriate in this context, since it is well-established and rehearsed frequently in Western society, and women generally perceive such ‘traditional’ views of the ingroup as unfair (e.g., Prentice & Carranza, 2002; Swim, Hyers, Cohen, & Ferguson, 2001).

Methodology

As mentioned earlier, a key aim of the present study was to obtain evidence to support the strategic help-seeking hypothesis via a naturalistic methodology. To this end, the manipulation was communicated to participants via a fabricated telephone-call. Participants heard the female (ingroup) experimenter’s side of the conversation, while she was talking to a male (outgroup) plumber ostensibly carrying out work in her flat. This cover-story involved a plumber as it was likely that such an individual would be stereotyped as a ‘traditional’ man (i.e., one who endorses ideas consistent

with the contents of the meta-stereotype, such as benevolent sexism and female dependence, e.g., Glick & Fiske, 1997).

In the Meta-Stereotype Present condition, the conversation related to the idea that the plumber thought the experimenter was incapable of moving some items in her flat (which needed to be moved for plumbing work to be carried out), so he did it for her. This was used to imply that the plumber (like men in general) perceived women as dependent. This suggests that the plumber's attitudes and behaviour were a consequence of his membership of the male gender group. In the Meta-Stereotype Absent condition, the conversation was almost identical, except the plumber's behaviour was attributed to his impatient personality (rather than his gender group-related stereotypical beliefs). He was described as being 'unlike any person the experimenter had met before' (in terms of his impatience), which highlighted low levels of behavioural consensus with others, and should thus have encouraged participants to engage in a personality-related (rather than a group-related) behavioural attribution.

It was felt that this manipulation represented a subtle but realistic way to make the meta-stereotype salient, since it avoided asking participants to think explicitly about male and female traits. This manipulation also simplified the study's design by removing the need for a two-study cover story (which, albeit useful in some contexts, can risk arousing participants' suspicions).

Making the Meta-Stereotype 'Bite'

The nature of the meta-stereotype manipulation in the present study was also intended to ensure that participants were really affected by the meta-stereotype and its contents (thereby increasing the chances that it would have strong effects on their help-seeking behaviour). One issue here concerns the problems surrounding female

sub-groups (discussed in relation to Study 2). In Study 2, there was concern that participants could have perceived the meta-stereotype as applying to some sub-groups of women (e.g., that men perceive *housewives* as dependent), but not to others (e.g., that men do not perceive *professional women* as dependent; rather they perceive them as competent and cold), (e.g., Eckes, 2002; Fiske et al., 2007). Using rating scales to invoke meta-stereotype salience meant that participants in Study 2 could rationalise that the meta-stereotype applied to other sub-groups of women but not to their sub-group, enabling them to distance themselves from the threatening elements of the meta-stereotype. If this was the case, it was likely the meta-stereotype manipulation was weakened in Study 2.

In the present study, however, participants witnessed a woman (whom they ideally perceived to be relatively similar to themselves) defining herself as being treated in a stereotype-consistent way by a male. These participants should therefore be less able to conclude that the meta-stereotype was only relevant to other types of women, since they had just witnessed a concrete example of a woman (who was similar to them) being stereotyped as dependent. The manipulation should therefore have increased the chance that participants would judge the stereotype of female dependency as posing a potential threat to ‘women like them’. Items were included in the post-help-seeking questionnaire to investigate this idea.

The Task

The present study involved an anagram task (rather than the crime-mystery task used in the previous study). The unanswerable nature of some of the crime-mystery recall questions and the two-step nature of the task (where participants were instructed to answer the recall questions to enable them to solve the mystery) may have been at least partly responsible for the much higher levels of *full answer-seeking*

observed in the previous study, compared to Study 2. Returning to the anagram task was intended to help remedy this issue.

Using anagrams instead of recall questions also avoided the problem of how to manage participants' uncertainty about the answers to the recall questions. In the mystery recall task, participants often wrote "I don't know" for an answer, or answered a question incorrectly. Drawing conclusions on exactly what participants' motivations were for seeking help (or otherwise) on these items was complex (see the previous study). However, this problem is avoided with an anagram task, since in the majority of cases, participants will either answer the question correctly, or they will leave the question blank. This means that categorising participants' help-seeking behaviour involves simply discounting any anagrams participants answered correctly (on which they required no help), and then analysing their help-seeking behaviour for the unanswered anagrams (i.e., the method used in Study 2)

Method

Participants and Design

Female undergraduates ($N = 108$; all native English speakers, to ensure they understood the anagram task) were assigned randomly to one of four experimental conditions in a 2 (Source of Help: Ingroup/Outgroup) X 2 (Meta-Stereotype Status: Meta-Stereotype Absent/Meta-Stereotype Present) design (Ingroup Meta-Stereotype Absent condition $N = 27$, Outgroup Meta-Stereotype Absent condition $N = 26$, Ingroup Meta-Stereotype Present condition $N = 28$ and Outgroup Meta-Stereotype Present condition $N = 27$).

Two participants were dyslexic, so were removed from the analysis. Furthermore, one participant was a friend of the experimenter and therefore had prior

knowledge of the research, so was also removed from the analysis. Additionally, any participants who suspected that the aim of the study may involve investigating the link between gender and help-seeking ($N = 15$: six in the Outgroup Meta-Stereotype Present, five in the Outgroup Meta-Stereotype Absent, two in the Ingroup Meta-Stereotype Present and two in the Ingroup Meta-Stereotype Absent conditions) were removed from the analysis. Finally, four participants claimed not to know the sexes of the researchers who were the potential sources of help to them in the study (three in the Ingroup Meta-Stereotype Absent condition and one in the Outgroup Meta-Stereotype Present condition), so they were also removed from the analysis. This left a total of 86 participants (Ingroup Meta-Stereotype Absent condition $N = 22$, Outgroup Meta-Stereotype Absent condition $N = 21$, Ingroup Meta-Stereotype Present condition $N = 23$ and Outgroup Meta-Stereotype Present condition $N = 20$; $M_{\text{age}} = 23.21$ years, $SD = 7.48$, age range = 17-59 years).

Participants were recruited through an online course credit scheme, and were therefore never made aware that they were required to be female to participate in the study, thereby reducing the chance of participants becoming suspicious about the study's true aim. Participants received either a small monetary payment or partial course credit in return for their participation.

Procedure and Measures

Participants were tested individually in a laboratory. The experimenter (JW) introduced herself as a research assistant (rather than the person running the study), and explained that she was simply helping an off-campus research team collect data. JW told participants that the off-campus research team had devised the study, and were now collecting data from various universities. For ease, the team were collecting

data remotely, via computer.¹ JW explained that participants would use a desktop computer to enter all of their answers during the study, and that the research team would be able to view and respond to these answers remotely, in real-time. To strengthen this feeling of immediacy and online connection, a webcam was placed on top of the computer monitor (although participants were assured it was a remnant of a previous study in which the researchers had to see the participants as well as merely respond to them, and that it was now disconnected). In reality, there was no research team, and the computer was pre-programmed using MediaLab Research Software.²

To help create a salient intergroup context, the study was introduced as an investigation into male and female reasoning styles. Although the on-screen instructions stressed that males and females showed equal competency in problem-solving tasks, it was explained that males and females may use different (but equally good) reasoning strategies when solving problems. The study ostensibly aimed to investigate these differences. It was hoped this cover-story would create an intergroup context, without stimulating feelings of intergroup rivalry (see Appendix 5 for experimental materials).

At the end of these on-screen instructions, the members of the ostensible research team referred to themselves by their first-names (Emma, Lisa and Kimberley in the Ingroup condition, and Mark, Tony and Rob in the Outgroup condition), in an attempt to reinforce their gender group identities. The researchers also provided some background information about themselves, apparently to allow participants to get to know them better. In reality, this information was provided in order to make the

¹ It should be noted that ‘the researchers’ refers to the (off-campus) team apparently doing the research-*not* to JW.

² As well as making the potential helpers appear more real, this computer-based methodology was intended to resolve issues from previous studies regarding the experimenter being a potential audience to participants’ help-seeking.

researchers sound more real and to enable their gender identities to be reinforced. This was achieved by describing the female researchers (in the Ingroup condition) as enjoying stereotypically ‘feminine’ pastimes, such as dancing, yoga and romantic films, while the male researchers (in the Outgroup condition) were described as enjoying stereotypically ‘masculine’ pastimes, such as football, rugby and action films.³

Participants then completed some ‘background questions’, which asked about their experiences of problem-solving, their attitudes towards their gender, and their affect. In reality, these items were used to maintain the cover-story and to make participants’ gender identity salient, as well as to obtain a pre-manipulation measure of female identification, and to allow JW to introduce the meta-stereotype manipulation.

Puzzle-Solving Skills

Participants indicated how often they engage in problem-solving activities (1 = *never* and 7 = *all the time*) and how important they deem problem-solving skills to be (1 = *not important at all* and 7 = *extremely important*). These two items were combined to form a puzzle-solving skills scale ($M = 4.21$, $SD = 1.17$, $r = .53$, $N = 86$, $p < .001$).

Pre-Manipulation Level of Identification

Participants were presented with six items from Doosje, Ellemers and Spears (1995), which were adapted to make reference to participants’ female identity (e.g., “*I see myself as a woman*”; 1 = *not at all* and 7 = *very much*). These items were combined to form a measure of pre-manipulation identification ($M = 5.67$, $SD = 1.00$, Cronbach’s $\alpha = .86$).

³ It was hoped that including hobbies such as football in the Outgroup condition would help ensure that participants perceived the potential male helpers as *typical men* (Eckes, 2002): a male sub-group whose members might be likely to endorse perceptions of female dependency (See Study 2 Discussion).

Pre-Manipulation Affect

Participants also rated their current mood on two 7-point bipolar scales (*sad/happy* and *tense/relaxed*). These items were irrelevant to the study, but their appearance on-screen prompted JW to pretend to receive the telephone-call (JW's desk was positioned behind the participant, allowing her to view the participant's computer screen, and thus see what item the participant was currently answering).

Telephone Conversation

A partition hid JW's desk from the participant's view, allowing her to activate her mobile-phone without being seen to have done so. On making her mobile-phone ring, JW apologised to the participant and requested they stop answering questions while she took the call. Before doing so, she said to the participant (as an aside) that the caller was the plumber ('Joe') working in her flat, so she needed to answer in case there was a problem. JW then read from a hidden script (the nature of which differed by condition), to ensure the contents of the calls remained constant across trials. Although the best way to achieve this would have been to pre-record the two conversations (and then play the relevant call using a concealed device), it was felt that doing this could arouse participants' suspicions, since it would be obvious they were listening to a recording, rather than to JW's live voice. Additionally, the contrast between the recording and JW's live speech during other parts of the study would have been very obvious to participants, and would have been likely to reduce the realism of the manipulations. It was therefore felt that a pre-written and pre-learned script read 'live' in each trial would be the best compromise. Pilot testing revealed both conversations to be similar in content, length and valence.

In both conditions, the conversation made it clear that Joe was male, and was calling JW to ask her if he could access a room in her flat (see Appendix 5, which

includes a transcript of the ‘conversation’). JW explained to Joe that this would be alright, but that it could not happen instantly, because she would have to move her possessions out of the room first. It then became clear from JW’s responses that Joe had already moved these items, and that JW was irritated by this (*Ok- it doesn’t matter now, because you’ve done it anyway!*). At the end of the call, JW expressed her irritation to the participant. In the Meta-Stereotype Absent condition, JW attributed the act to Joe’s unusually impatient personality, and made a comment to this effect to the participant after the conversation ended (*Sorry about that- my plumber is the most impatient person in the world- I’ve never met anybody like him before!*). In the Meta-Stereotype Present condition, JW attributed Joe’s behaviour to him endorsing the ‘typical’ male belief that women cannot do anything without a man’s help (again, she made a comment about this to the participant after the conversation ended: *Sorry about that- my plumber is such a typical man- he thinks that women are incapable of doing anything on their own!*). After this, JW asked the participant to continue with the experiment and to proceed with answering items.

Anagram Task

Next, the participant was presented with an on-screen anagram task which involved attempting 10 anagrams in 90 seconds. The anagrams were identical to those used in Study 2, with three exceptions: *brown* was changed to *black*, *screwdriver* to *skateboards* and *cauliflower* to *raspberries*. This was due to the computer program not displaying the letter *W* correctly in the anagrams. The new words were selected because they were the same length as the original words.

Dependent Variable: Help-Seeking

After 90 seconds had elapsed, the participant received an on-screen help-seeking consultation form, where they could apparently seek as much or as little help

on the anagrams from the researchers as they wished. For each anagram, participants could choose from one of four levels of assistance (*none, a small hint, a large hint and a full answer*). The research team would ostensibly be able to see these requests, and send back any help required. Participants were told they would have more time to complete the anagrams at a later point.

Defining Help-Seeking

Since help-seeking in the previous anagram study (Study 2) was defined as the percentage of *large hints* combined with the percentage of *full answers*, this definition was also adopted in the present study. Using this definition meant 82.60% of participants sought help (regardless of the extent of that help).⁴

Measuring Additional Variables

While the participant was waiting for the ‘assistance’ to be sent back by the researchers, they answered questions that apparently aimed to measure their thoughts and feelings about the study. In reality, these items enabled potential mediator and moderator variables to be measured, and were identical in both conditions.

Post-manipulation affect. Affect was measured with two 7-point bipolar scales (*bad/good* and *negative/positive*). These were combined to form a post-manipulation positive affect scale, ($M = 4.12$, $SD = 1.18$; $r = .84$, $N = 86$, $p < .001$).

Perceived similarity to the researchers. Participants were presented with four items adapted from Branscombe, Wann, Noel and Coleman (1993) and Abrams, Bown, Marques and Doughill (2002), which used 7-point bipolar scales to measure

⁴ Although the predominant reason for adopting the ‘*large hints* plus *full answers*’ definition of help-seeking in the present study was to ensure consistency with Study 2, it should be noted that the levels of help-seeking observed in the present study did create a similar pattern to those observed in Study 2. As in Study 2, the percentage of *full answers* sought on unanswerable anagrams was very low (4.86%; a value in stark contrast to the 41.12% observed during the mystery task in Study 3). Moreover, very few responses on unanswerable anagrams were for *no help* (3.75%). Thus, as in Study 2, defining ‘help-seeking’ as *full answers* or as *small hints* plus *large hints* plus *full answers* risked floor and ceiling effects respectively. Instead, combining *large hints* (51.32%) and *full answers* (4.68%) produced a more acceptable value (56.00%). These results help to vindicate the decision to define ‘help-seeking’ as *large hints* plus *full answers* in the present study.

perceived similarity to the researchers, closeness to the researchers and the likelihood of becoming good friends with the researchers. These items were combined to form a similarity scale ($M = 3.68$, $SD = 0.81$; Cronbach's $\alpha = .61$). A single item was also included to measure participants' perceived similarity to JW (1 = *not at all similar* and 7 = *very similar*; $M = 4.13$, $SD = 1.17$).

Experiences of the experimental situation. Participants were asked about their perceptions of the experimental situation using items from Study 3. Participants were asked to think about the help-seeking episode, and to rate how they had acted (1 = *completely as an individual* and 7 = *completely as a woman*; $M = 2.06$, $SD = 1.27$). Using the same scale, they were also asked to consider how they were evaluated by the researchers ($M = 2.57$, $SD = 1.74$). Participants also indicated the extent to which they interacted with the researchers on the basis of their gender (1 = *not at all* and 7 = *completely*; $M = 2.01$, $SD = 1.42$), and the extent to which they interacted with the researchers as a unique individual (1 = *not at all* and 7 = *completely*; $M = 5.07$, $SD = 1.60$). The final item was reversed and combined with the others to form a group-context scale, ($M = 2.39$, $SD = 1.15$, Cronbach's $\alpha = .76$). This scale also acted as a measure of situational (female) identity salience.

Perceptions of help-seeking. To investigate the different types of threat that may have been evoked in the Ingroup and Outgroup conditions when the meta-stereotype was salient, items were included in all conditions to measure the extent to which participants felt that women's image *in general* was threatened by the experimental situation (as could be the case in the Outgroup condition), or whether their *own* image as individual ingroup members was threatened (as could be the case in the Ingroup condition).

Participants were thus asked to rate (1 = *not at all* and 7 = *very much*) the extent to which they felt that their image as a woman was at stake during the study, ($M = 2.37$, $SD = 1.68$), the extent to which seeking help would damage their own image as women, ($M = 2.36$, $SD = 1.76$), the extent to which the image of women (in general) was at stake during the study, ($M = 2.65$, $SD = 1.79$), and the extent to which seeking help would damage women's image (in general), ($M = 2.44$, $SD = 1.75$). The former two items were combined to form a personal evaluative concerns scale ($M = 2.37$, $SD = 1.51$; $r = .54$, $N = 86$, $p < .001$), while the latter two items were combined to form a group-related evaluative concerns scale ($M = 2.55$, $SD = 1.67$; $r = .78$, $N = 86$, $p < .001$).

Post-manipulation level of identification. Participants were presented with the identification measure a second time ($M = 5.48$, $SD = 1.12$, Cronbach's $\alpha = .90$). Since the pre- and post-manipulation measures of identification correlated ($r = .93$, $N = 86$, $p < .001$), the two scales were combined into an overall identification measure ($M = 5.57$, $SD = 1.04$, Cronbach's $\alpha = .94$). Unless otherwise stated, any analysis involving level of identification will use this combined scale.

Ingroup favouritism. To measure ingroup favouritism, participants were asked to estimate how well female UK university students perform, on average, compared to male UK university students. This involved participants selecting a response from a 9-point rating scale, which ranged in 5% increments from *20% worse than males* to *20% better than males*, with *same as males* at the mid-point. This item was coded as ranging from -4 to +4, with 0 as the mid-point, ($M = 0.55$, $SD = 1.45$), and was adapted from Deprét and Fiske's (1999) measure of ingroup favouritism.

Intergroup status disparities. Participants were asked to estimate the relative societal status of women (compared to men). This involved participants selecting a

response from a 9-point rating scale, which ranged in 5% increments from *20% lower than males* to *20% higher than males*, with *same as males* at the mid-point. Again, this was coded from -4 to +4, with 0 as the mid-point, ($M = -1.20$, $SD = 1.23$).

Male meta-stereotype endorsement and perceived unfairness. Participants were presented with four statements which related to the idea that women are dependent (e.g., *Women's most distinguishing trait is their neediness*). For each statement, participants were asked to indicate the extent to which they agree that men describe women in that way (1 = *not at all* and 7 = *very much*), and, if men did describe women in that way, how unfair that would be (1 = *very unfair* and 7 = *very fair*).⁵ The 'agreement' items were combined to form a male stereotype endorsement scale, ($M = 3.79$, $SD = 1.38$, *Cronbach's* $\alpha = .82$), while the 'unfairness' items were combined to form a meta-stereotype unfairness scale, ($M = 5.99$ $SD = 0.91$, *Cronbach's* $\alpha = .77$).

Social state self-esteem. Swim et al. (2001) found that Social State Self Esteem is negatively affected after one witnesses discriminatory comments or events. The seven items in the social self-esteem sub-scale of the State Self-Esteem Scale (Heatherton & Polivy, 1991) were adapted to refer to the participants' gender group, rather than to them as individuals (e.g., *I feel concerned about the impression that women (as a group) are making*; 1 = *disagree strongly* and 7 = *agree strongly*). The items were combined to form a social state self-esteem scale, where high values indicated higher social esteem ($M = 5.33$, $SD = 1.07$, *Cronbach's* $\alpha = .82$).

⁵ Since all participants experienced an intergroup comparative context in the present study (unlike Studies 2 and 3), the unfairness items were deliberately worded in a less ambiguous manner than they were in these earlier studies. That is, rather than asking participants to rate how unfair it would be if *they themselves* were perceived in dependency-related terms (with the assumption that these items would be interpreted by participants in different ways, depending on condition), participants in the present study were asked to rate the extent to which it would be unfair if *men perceived women* in dependency-related terms.

Sympathy for feminist beliefs. To rule out any between-condition differences in key variables being due simply to participants in one condition being more aware of female image-related issues, participants' sympathies for feminist beliefs were measured with the eight items from the Modern Sexism Scale (Swim, Aikin, Hall, & Hunter, 1995), with 'America' being replaced with 'Britain' in the items (e.g., *Discrimination against women is no longer a problem in Britain*; 1 = *disagree strongly* and 7 = *agree strongly*). The relevant items were reversed and combined with the others to form a feminism scale (with high values indicating sympathy for feminist beliefs; $M = 4.41$, $SD = 0.98$, Cronbach's $\alpha = .82$).

Sub-group membership. Participants indicated the female sub-group to which they believed themselves to belong. They were also asked to carry out this task with reference to JW, and (in the Ingroup conditions only) to the female research team. The list of sub-groups (*homemaker*, *professional woman*, *feminist* and *athletic woman*) was adopted from previous work (e.g., DeWall et al., 2005; Vonk & Olde-Monnikhof, 1998). Participants were asked to select one sub-group, or to select *Other* if they felt that none of these options were suitable.

Manipulation and suspicion checks. Finally, participants were asked to indicate the gender/s of the research team and to note down what they believed to be the aim of the study. After the study ended, participants were questioned with regards to what they could remember about the telephone call, under the pretence that JW was worried the call had distracted them, and she therefore wished to check how much attention they had paid to the call. A number of probes were used if participants were not forthcoming with information (e.g., *Do you remember the sex of the person on the other end of the phone?*). Participants were not excluded from the analysis on the basis of their answers to these questions: although some participants claimed to be

unclear on some of the key details of the telephone call, it was felt that this uncertainty may be the product of social norms (e.g., that it is rude to listen to others' telephone conversations, and even ruder to provide evidence that one was doing so), so this was not taken as evidence of participants not listening to the contents of the call. After completing these final items, participants were debriefed and compensated.

Results

Manipulation Checks

Participants in the Meta-Stereotype Present condition believed men endorsed the dependency stereotype to a significantly greater extent ($M = 4.15$, $SD = 1.36$) than participants in the Meta-Stereotype Absent condition ($M = 3.43$, $SD = 1.33$; $t(84) = -2.49$, $p = .02$, $d = 0.54$), providing tentative evidence to suggest the Meta-Stereotype Status manipulation was successful.

Participants in the Ingroup condition felt significantly more similar to the (female) potential helper researchers ($M = 3.88$, $SD = 0.79$) than participants in the Outgroup condition felt to the (male) potential helper researchers ($M = 3.46$, $SD = 0.79$; $t(84) = 2.45$, $p = .02$, $d = .053$). This suggests that the Source of Help manipulation was successful.

Main Analyses

The main effect means and standard deviations for the Ingroup vs. Outgroup condition comparison can be found in Table 18, while the main effect means and standard deviations for the Meta-Stereotype Absent vs. Meta-Stereotype Present condition comparison can be found in Table 19. The means for all four conditions can be found in Table 20 (to simplify this table, standard deviations have been omitted). Participants' perceived puzzle-solving skills, pre-manipulation positive affect, social-

state self-esteem, personal and group-related image concerns, feminist sympathies, perceived group-related status disparities and extent of ingroup favouritism did not differ between-condition and added nothing to the analyses, so will not be discussed.

Table 18.

Main effect means and standard deviations for Ingroup vs. Outgroup conditions.

Variables (all 1-7, unless stated)	Experimental Condition			
	Ingroup		Outgroup	
	M	SD	M	SD
Help-seeking (% large hints + % full answers)	52.70	34.17	59.62	36.96
Post-manipulation positive affect	4.21	1.15	4.02	1.22
Overall similarity to researchers	3.88*	0.79	3.46*	0.79
Similarity to JW	4.11	0.89	4.15	1.42
Personal image concerns scale	2.37	1.55	2.37	1.48
Group image concerns scale	2.62	1.85	2.46	1.46
Overall group-context scale (personal + group)	2.48	1.14	2.29	1.16
Level of identification pre-manipulation	5.52	1.07	5.84	0.89
Level of identification post-manipulation	5.32	1.18	5.64	1.04
Level of identification pre/post	5.42	1.10	5.74	0.95
Belief that men endorse the stereotype	3.71	1.27	3.88	1.51
Unfairness of men endorsing stereotype	5.77*	1.03	6.22*	0.69
Social state self-esteem	5.23	1.14	5.44	1.01
Women's societal status compared to men ^a	-1.09	1.29	-1.32	1.15
Women's academic performance (vs. men) ^a	0.60	1.18	0.49	1.17
Sympathy for feminist ideals	4.46	1.02	4.35	0.94
Puzzle-solving skills	4.21	1.14	4.21	1.21

^a = -4 to +4 scale, * = $p < .05$.

Table 19.

Main effect means and standard deviations for Meta-Stereotype Present vs. Meta-Stereotype Absent conditions.

Variables (all 1-7, unless stated)	Experimental Condition			
	M-S Absent		M-S Present	
	M	SD	M	SD
Help-seeking (% large hints + % full answers)	65.48*	34.74	46.52*	34.03
Post-manipulation positive affect	4.13	1.17	4.12	1.21
Overall similarity to researchers	3.67	0.80	3.69	0.84
Similarity to JW	3.91†	1.09	4.35†	1.21
Personal image concerns scale	2.41	1.46	2.33	1.57
Group image concerns scale	2.62	1.81	2.48	1.53
Overall group-context scale (personal + group)	2.34	1.10	2.44	1.21
Level of identification pre-manipulation	5.63	1.10	5.72	0.89
Level of identification post-manipulation	5.42	1.18	5.53	1.07
Level of identification pre/post	5.53	1.13	5.62	0.96
Belief that men endorse the stereotype	3.43*	1.33	4.15*	1.36
Unfairness of men endorsing stereotype	5.95	0.94	6.03	0.89
Social state self-esteem	5.27	1.03	5.39	1.12
Women's societal status compared to men ^a	-1.21	1.23	-1.19	1.24
Women's academic performance (vs. men) ^a	0.53	1.45	0.56	1.47
Sympathy for feminist ideals	4.49	0.92	4.33	1.04
Puzzle-solving skills	4.31	1.13	4.10	1.20

a = -4 to +4 scale, * = $p < .05$, † = $p < .10$.

Table 20.

Means for all four experimental conditions.

Variables (all 1-7, unless stated)	Experimental Condition			
	Ingroup		Outgroup	
	M-S Present	M-S Absent	M-S Present	M-S Absent
Help-seeking (% large hints + % full answers)	43.32†	62.50†	50.19	68.60
Post-manipulation positive affect	4.15	4.27	4.08	3.98
Overall similarity to researchers	3.91†	3.85	3.43†	3.49
Similarity to JW	4.26	3.95	4.45	3.86
Personal image concerns scale	2.13	2.61	2.55	2.19
Group image concerns scale	2.33	2.93	2.65	2.29
Overall group-context scale (personal + group)	2.47	2.50	2.41	2.18
Level of identification pre-manipulation	5.54	5.51	5.93	5.75
Level of identification post-manipulation	5.29	5.36	5.87	5.49
Level of identification pre/post	5.41	5.43	5.87	5.62
Belief that men endorse the stereotype	3.85	3.56	4.50	3.30
Unfairness of men endorsing stereotype	5.78†	5.76	6.31†	6.14
Social state self-esteem	5.41	5.04	5.37	5.50
Women's societal status compared to men ^a	-0.96	-1.23	-1.45	-1.19
Women's academic performance (vs. men) ^a	0.70	0.50	0.40	0.57
Sympathy for feminist ideals	4.32	4.61	4.34	4.36
Puzzle-solving skills	4.07	4.36	4.15	4.26

a = -4 to +4 scale, † = $p < .10$. The statistical significance of the differences in magnitude between means was obtained via simple effects analysis. No significant interactions were obtained.

Percentage of Anagrams Unanswered

The percentage of anagrams left unanswered did not differ significantly between the Source of Help conditions (Ingroup $M = 72.92$, $SD = 6.61$; Outgroup $M = 73.68$, $SD = 6.23$; $F(1, 82) = 0.30$, $p = .58$, $\eta^2 = .004$), nor between the Meta-Stereotype Status conditions (Present $M = 73.47$, $SD = 5.99$; Absent $M = 73.12$, $SD = 6.86$; $F(1, 82) = 0.07$, $p = .80$, $\eta^2 = .001$). The interaction was also non-significant, $F(1, 82) = 2.07$, $p = .15$, $\eta^2 = .025$. This suggests that any between-condition differences in help-seeking were due to the experimental manipulations, rather than participants in one condition simply finding the task more difficult.

Help-Seeking

A two-way between-groups ANOVA revealed a significant main effect of Meta-Stereotype Status in the direction predicted, with participants in the Meta-Stereotype Present condition seeking significantly less help ($M = 46.52$, $SD = 34.03$) than participants in the Meta-Stereotype Absent condition, ($M = 65.48$, $SD = 34.74$; $F(1, 82) = 6.31$, $p = .014$, $\eta^2 = .071$). There was no main effect of Source of Help, $F(1, 82) = 0.75$, $p = .39$, $\eta^2 = .009$, (Outgroup condition $M = 59.62$, $SD = 36.96$; Ingroup condition $M = 52.70$, $SD = 34.17$). The interaction between Source of Help and Meta-Stereotype Status was also non-significant, $F(1, 82) = 3.11$, $p = .08$, $\eta^2 = .036$.

Level of Identification

Analysing the combined pre- and post-manipulation identification measure revealed that overall level of identification did not differ by condition (Source of Help: $F(1, 82) = 2.05$, $p = .16$, $d = 0.02$; Meta-Stereotype Status: $F(1, 82) = 0.25$, $p = .62$, $d = 0.003$; Source of Help X Meta-Stereotype Status: $F(1, 82) = 0.34$, $p = .56$, $d = 0.003$).

0.004). Neither pre- nor post-manipulation identification was found to moderate the effect of either Meta-Stereotype Status or Source of Help on help-seeking.⁶

Situational Identity Salience

The experimental situation was perceived in equally group-related terms by participants in the Outgroup ($M = 2.29$, $SD = 1.16$) and Ingroup conditions ($M = 2.48$, $SD = 1.14$; $F(1, 82) = 0.56$, $p = .46$, $\eta^2 = .007$), and by participants in the Meta-Stereotype Present ($M = 2.44$, $SD = 1.21$) and Meta-Stereotype Absent conditions ($M = 2.34$, $SD = 1.10$; $F(1, 82) = 0.16$, $p = .69$, $\eta^2 = .002$). The interaction between the two main effects was also non-significant, $F(1, 82) = 0.28$, $p = .60$, $\eta^2 = .003$, suggesting an intergroup context was equally salient in all conditions. Situational salience did not moderate the effect of Meta-Stereotype Status or Source of Help on help-seeking.

Perceived Similarity to JW

A two-way ANOVA revealed a significant main effect of Meta-Stereotype Status on perceived similarity to JW, with participants in the Meta-Stereotype Present condition feeling marginally more similar to JW ($M = 4.35$, $SD = 1.21$) than participants in the Meta-Stereotype Absent condition ($M = 3.91$, $SD = 1.09$; $F(1, 82) = 3.20$, $p = .08$, $\eta^2 = .038$). The main effect of Source of Help was non-significant, (Outgroup $M = 4.15$, $SD = 1.42$; Ingroup $M = 4.11$, $SD = 0.89$; $F(1, 82) = .03$, $p = .86$, $\eta^2 = .000$). The interaction between the two main effects was also non-significant, $F(1, 82) = 0.33$, $p = .57$, $\eta^2 = .004$.

⁶ A potential reason for this lack of moderation may be the high levels of negative skew observed in the identification measure (pre-manipulation: $z_{\text{skew}} = -3.75$ ($p < .001$), $z_{\text{kurtosis}} = 2.55$ ($p < .05$); post-manipulation: $z_{\text{skew}} = -2.37$ ($p < .05$), $z_{\text{kurtosis}} = 0.25$ ($p > .05$); pre/post combined: $z_{\text{skew}} = -3.11$ ($p < .01$), $z_{\text{kurtosis}} = 1.42$ ($p > .05$). Comparing these values with the (post-manipulation) identification measure of female identification in Study 2 ($z_{\text{skew}} = -0.24$, $z_{\text{kurtosis}} = -1.14$, $ps > .05$) reveals the identification data in the present study to be far more skewed (although it should be remembered that the measure in Study 2 involved different items to the present study). Nonetheless, this suggests participants identified very highly as women in the present study. Transforming the identification data did not reveal a moderating effect.

Sub-Group Membership

Over three-quarters of participants (84.88%) rated JW as a *professional woman*, with the rest rating her as *feminist* (5.81%) or *other* (9.30%). Furthermore, 73.33% of participants in the Ingroup condition labelled the female researchers as *professional women*, while the rest selected *feminists* (6.67%), *athletic women* (6.67%) or *other* (13.33%). The majority of participants also rated themselves as *professional women* (51.16%), with the rest selecting *homemaker* (11.63%), *athletic woman* (10.47%), *feminist* (3.49%) or *other* (23.26%). Further analyses indicated that 44.32% of participants rated both themselves and JW as *professional women*, while 40.00% of participants (in the Ingroup condition) rated both themselves and the (female) researchers as *professional women*. If the *other* option had not been available to participants, these values would likely have been higher.

Unfairness of the Meta-Stereotype

A two-way ANOVA revealed a significant main effect of Source of Help on perceived unfairness of the meta-stereotype⁷, with Outgroup condition participants perceiving the meta-stereotype as significantly more unfair ($M = 6.22$, $SD = 0.69$) than Ingroup condition participants ($M = 5.77$, $SD = 1.03$; $F(1, 82) = 5.56$, $p = .02$, $\eta^2 = .06$). The main effect of Meta-Stereotype Status was non-significant, (Present $M = 6.03$, $SD = 0.89$; Absent $M = 5.95$, $SD = 0.94$; $F(1, 82) = .24$, $p = .62$, $\eta^2 = .003$). The interaction between the two main effects also yielded a non-significant result, $F(1, 82) = 0.15$, $p = .70$, $\eta^2 = .002$.

Conditional Indirect Effects Analysis: Comparing Experiences of Ingroup and Outgroup Help-Seeking in the Meta-Stereotype Present Condition

Logic

⁷ Although the meta-stereotype was not present in all conditions, all participants received (post-manipulation) items enquiring about how unfair it would be for men to perceive women in dependency-related terms.

In the present study, no differences in help-seeking were observed between the Ingroup and Outgroup conditions (a finding consistent with the second potential outcome described in the study's Introduction). Nonetheless, it was also predicted that, when the meta-stereotype was present, participants may experience the act of help-seeking differently depending on the group membership of the potential helpers. To investigate this possibility, participants' post-help-seeking positive affect was considered (a variable which correlated negatively with help-seeking, $r = -.33$, $N = 43$, $p = .03$). The selection of affect as an indicator of participants' help-seeking-related experiences was based on evidence from previous research which has highlighted the relevance of affect levels in group-related helping transactions. For instance, Nadler and Halabi (2006) found that receiving assumptive help from a member of a higher-status outgroup in the context of unstable intergroup status relations reduced participants' affect levels, which the authors suggested was an outcome of experiencing social identity threat (see Chapter 6).

In light of the finding from Study 2 regarding the important role played by perceived meta-stereotype trait unfairness, analyses were carried out to investigate the idea that, when the meta-stereotype was present, perceived meta-stereotype unfairness may mediate the effect of Source of Help on post-help-seeking affect. It is important to remember that, in the present study, the perceived unfairness variable measured participants' opinions in a rather more specific manner than the perceived meta-stereotype trait unfairness variable in Study 2. Rather than simply asking participants to rate the extent to which it would be unfair if they themselves were perceived in dependency-related terms, the items in the present study enquired about the extent to which participants would find it unfair if *men perceived women* in dependency-related terms. This suggests the perceived unfairness variable in the present study tapped into

participants' thoughts about how the group as a whole is perceived by the outgroup (males), thereby making it suitable for use in investigating group-related image concerns.

With this in mind, it was predicted that, when the meta-stereotype was present, perceptions of its unfairness would mediate the effect of Source of Help on post help-seeking affect. Specifically, it was predicted that facing an outgroup helper in the context of a salient meta-stereotype would lead to higher levels of perceived meta-stereotype unfairness than facing an ingroup helper in such circumstances, and that high perceived unfairness would lead to low post-help-seeking affect.⁸ Both elements of this prediction will be explained in turn.

First, with regards to the prediction that facing an outgroup helper in the context of a salient meta-stereotype would lead to higher levels of perceived meta-stereotype unfairness than facing an ingroup helper, it was reasoned that the former situation should promote a stronger sense of group-related image concern than the latter situation. Specifically, while the former situation has the potential to threaten the whole ingroup's image in the eyes of outgroup members (i.e., by seeking outgroup help, the whole ingroup could look bad), the latter situation only has the potential to threaten the participant's personal image within the context of the ingroup (i.e., by seeking ingroup help, the participant could look like a bad ingroup member in the eyes of fellow ingroup members).

Second, these feelings of perceived unfairness were then expected to reduce participants' post-help-seeking affect. This was predicted because, by seeking help,

⁸ Although specific items were included in the present study to measure the extent to which seeking help was deemed to threaten the ingroup's image, these did not differ between-condition and did not correlate with the perceived meta-stereotype unfairness variable ($r = -.07$, $N = 86$, $p = .55$). This may relate to the high levels of reflexivity required to enable participants to answer these ingroup-related image threat items.

participants had engaged in behaviour which actually had the potential to threaten the ingroup's image via stereotype confirmation. Participants who experienced high levels of perceived meta-stereotype unfairness (and thus could be argued to be most concerned about the ingroup's image) were expected to realise this, and were predicted to respond to this realisation by experiencing particularly low levels of affect after seeking help.

However, since the perceived unfairness variable only measured the extent to which participants would consider it unfair *if* men perceived women in dependency-related terms, it was not possible to conclude whether the participants *believed* that men perceive women this way. Participants should only experience low levels of post-help seeking affect if they actually agreed that men stereotype women in such terms (since it is not possible to confirm an outgroup-held stereotype of the ingroup if the outgroup does not hold such perceptions in the first place). This is particularly relevant in the present study, because the Meta-Stereotype Present manipulation involved participants overhearing JW's personal beliefs regarding the ways in which men perceive women (rather than participants being able to express their own beliefs regarding this issue, which was an integral element of the meta-stereotype manipulations in previous studies). This means it was possible for participants in the present study to experience the meta-stereotype without actually believing that men perceive women in such terms. In light of this observation, it was predicted that the indirect effect of Source of Help on post help-seeking affect via perceived meta-stereotype unfairness would be moderated by the extent to which participants believed that men actually perceive women as dependent.⁹

⁹ Although perceived male endorsement was reported as a manipulation check variable at the outset of this Results section, a significant between-condition difference was only obtained when the Meta-Stereotype Present and Meta-Stereotype Absent conditions were compared (not when the Ingroup and Outgroup conditions were compared: see Table 18). Since the Meta-Stereotype Present and Meta-

Analysis

To investigate these predictions, a conditional indirect effects analysis was carried out (Preacher et al., 2007, see Figure 12 for the model that was tested, and see Appendix 1 for more information on this type of analysis). The Independent Variable was Source of Help (Ingroup Meta-Stereotype Present vs. Outgroup Meta-Stereotype Present), the Dependent Variable was post-help-seeking affect, the mediator was perceived meta-stereotype unfairness and the moderator was the extent to which men are believed to perceive women in dependency-related terms.

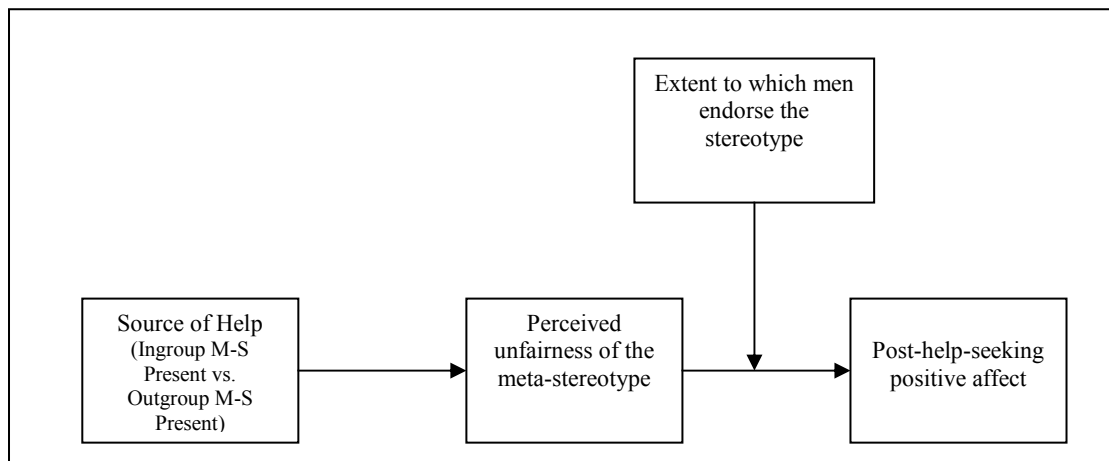


Figure 12. The conditional indirect effects model.

Both of the key paths in the model were found to be significant (see Appendix 1 for statistical explanations): i) Independent Variable to mediator: Source of Help predicted perceived unfairness, ($coeff. = 0.30$, $SE = 0.15$, $t = 2.03$, $p = .049$, see Table 21, second row), and ii) the interaction between the mediator and moderator to the

Stereotype Absent conditions are not being compared in this analysis (instead, the Ingroup and Outgroup conditions are being compared when the meta-stereotype is present), it is legitimate to consider the male endorsement variable as a measure of individual differences, thus making it a suitable moderator.

Dependent Variable: the interaction between perceived unfairness and the extent to which men are perceived to endorse the dependency stereotype predicted post-help-seeking affect, ($coeff. = -0.51$, $SE = 0.27$, $t = -1.91$, $p = .06$ see Table 21, seventh row).¹⁰ This indicates that although Source of Help indirectly affected post-help-seeking affect via perceived unfairness, this effect was conditional on (i.e., was moderated by) the extent to which men are perceived to endorse the dependency stereotype.¹¹

Table 21.

Results of the conditional indirect effects analysis, with the extent to which men are perceived to endorse the dependency stereotype as the moderator.

Predictor	Coeff.	SE	t
DV = Perceived meta-stereotype unfairness (the mediator in the model)			
Constant	0.00	0.15	0.00
Condition (Source of Help)	0.30	0.15	2.03*
(Ingroup Meta-Stereotype Present vs. Outgroup Meta-Stereotype Present)			
DV = Post-help-seeking positive affect (the DV in the model)			
Constant	4.15	0.18	23.09***
Condition (Source of Help)	0.11	0.20	0.57
(Ingroup Meta-Stereotype Present vs. Outgroup Meta-Stereotype Present)			
Male endorsement	0.13	0.21	0.64
Perceived unfairness	-0.17	0.21	-0.85
Unfairness x male endorsement	-0.51	0.27	-1.91†

*** = $p < .001$, * = $p < .05$, † = $p = .06$

¹⁰ The skew and kurtosis values of unfairness measure were analysed by dividing the two values by their respective standard errors. The resultant z-values were then compared to Field's (2005) critical values. This procedure revealed the variable to be both negatively skewed ($z = -6.03$, $p < .001$) and very kurtotic ($z = 6.90$, $p < .001$). The skew was most improved by using the square-rooting transformation procedure ($z_{\text{skew}} = 0.48$, $z_{\text{kurtosis}} = -1.44$, $ps > .05$), so the analysis was repeated with this transformed variable. This strengthened the results: the main effect of Source of Help on unfairness became stronger, with Outgroup condition participants expressing significantly higher levels of unfairness ($M = 1.44$, $SD = 0.48$) than Ingroup participants ($M = 1.18$, $SD = 0.49$; $F(1, 82) = 5.83$, $p = .02$, $\eta^2 = 0.07$). This was the same for the conditional indirect effects analysis: Source of Help significantly predicted perceived unfairness when the meta-stereotype was salient ($coeff. = 0.30$, $SE = 0.15$, $t = 2.03$, $p = .048$), while the relationship between perceived unfairness and affect depended on the extent to which participants believed men endorse the dependency stereotype ($coeff. = -0.51$, $SE = 0.20$, $t = -2.59$, $p = .01$). In light of these findings, it was decided to use the non-transformed variable, because transforming the data did not alter the key results, and using non-transformed data makes interpretation easier.

¹¹ Although affect correlated negatively with help-seeking ($r = -.33$, $N = 43$, $p = .03$), the model was non-significant when affect was replaced with help-seeking as the outcome variable.

Bootstrapping analysis. To investigate in more depth the significant moderating effect of male endorsement on the relationship between Source of Help and help-seeking via perceived unfairness, bootstrapping analysis was used to estimate the size of the conditional indirect effect at specific levels of the moderator variable (Preacher et al., 2007). The recommended number of 5000 bootstrap samples was used (Preacher & Hayes, 2008). Bias corrected and accelerated 95% confidence intervals revealed that when perceived male endorsement was high (one standard deviation above the mean), the conditional indirect effect was significant at $p < .05$ (*Upper CI* = -.007, *Lower CI* = -.57). However, when the same analysis was repeated for low perceived male endorsement (one standard deviation below the mean), the conditional indirect effect was non-significant, (*Upper CI* = .43, *Lower CI* = -.09). This indicates that, when the meta-stereotype was salient, there was an indirect effect of Source of Help on post-help-seeking affect via perceived meta-stereotype unfairness (but only for participants who believed that men perceive women as dependent).¹²

Simple slopes analysis. To enable the nature of the moderating effect of perceived male endorsement in the latter part of the conditional indirect effects model (i.e., between *perceived unfairness* and *affect*) to be examined, a regression analysis was carried out after controlling for the effect of Source of Help. This was achieved by also entering the (standardized) Source of Help variable into the first block of the regression (see Appendix 1 for statistical details). Confirming the results above, the interaction between standardized male endorsement and standardized unfairness

¹² For completeness, the conditional indirect effects analysis was repeated with only the data from the Meta-Stereotype Absent conditions. The result was non-significant. This indicates that the significant conditional indirect effect is only obtained when the meta-stereotype is present (which is consistent with predictions, since it is in such situations that group-related image concerns should be most prevalent.)

predicted post-help-seeking affect, $R^2 = 0.15$, $\Delta R^2 = 0.08$, $F(1, 38) = 3.64$, $p = .06$.¹³

This interaction was then plotted using simple slopes analysis (Preacher et al., 2006, see Figure 13). Consistent with predictions, high perceived meta-stereotype unfairness led to significantly lower post-help-seeking affect than did low perceived meta-stereotype unfairness, but only when perceived male endorsement of female dependency was high (*simple slope* = -0.69, $SE = 0.27$, $t = -2.55$, $p = .01$), not when it was low (*simple slope* = 0.34, $SE = 0.40$, $t = 0.86$, $p = .40$). Thus, facing outgroup helpers (compared to facing ingroup helpers) in the context of a salient meta-stereotype led participants to consider men's dependency-related images of women as more unfair, and high perceived unfairness led to low post-help-seeking-related affect (but only for participants who believed strongly that men actually endorse the dependency stereotype).¹⁴

¹³ The data were found to meet the assumptions of regression analysis. An outlier analysis was also performed, and only one case was found to have a standardized residual more than two standard deviations from the regression line. Additionally, one case had a leverage value that exceeded Stephen's (1992) criterion of three times the average leverage value of the sample, while eight other cases exceeded the more conservative criterion of twice the average leverage value of the sample (Hoaglin & Welsch, 1978). Removing all nine cases (plus the outlier) and repeating the moderation analysis produced a marginally-significant result ($R^2 = 0.21$, $\Delta R^2 = 0.08$, $F(1, 28) = 2.98$, $p = .095$). Since the interaction remained marginally significant after removing all these cases, it was decided that no cases were having an unduly large effect on the results, and that the moderation could be interpreted legitimately.

¹⁴ Before carrying out any of these analyses, the skew and kurtosis values of the key help-seeking measure were analysed by dividing the two values by their respective standard errors. The resultant z -values were then compared to Field's (2005) critical values. Although the skew was found to be non-significant ($z = 1.29$), the kurtosis was found to be significant at $p < .05$ ($z = 2.38$). For the sake of completeness, the help-seeking data were transformed using the three main types of transformation: log-10, square-rooting and reciprocal transformation (Field, 2005). The only transformation that did not worsen the distribution was square-rooting: when the transformed skew and kurtosis values were divided by their respective standard errors, both of the resultant values were non-significant ($z_{\text{skew}} = 1.77$, $z_{\text{kurtosis}} = 1.89$), indicating that the square-root transformation improved the distribution of the data. The key help-seeking result was re-analysed using this transformed help-seeking variable, and these calculations revealed that the main effect of Meta-Stereotype Status actually became stronger once the data were transformed, with participants in the Meta-Stereotype Present condition seeking significantly less help ($M = 3.31$, $SD = 2.99$) than participants in the Meta-Stereotype Absent condition ($M = 5.35$, $SD = 3.63$; $F(1, 82) = 7.79$, $p = .007$, $\eta^2 = .09$). As before, the main effect of Source of Help was non-significant, with participants in the Ingroup condition seeking non-significantly less help ($M = 3.92$, $SD = 3.26$) than participants in the Outgroup condition ($M = 4.77$, $SD = 3.65$; $F(1, 82) = 1.22$, $p = .27$, $\eta^2 = .02$). Furthermore, the interaction between the two main effects was still non-significant, $F(1, 82) = 0.03$, $p = 0.86$, $\eta^2 = .00$. In light of this finding, it was decided to use the non-transformed help-

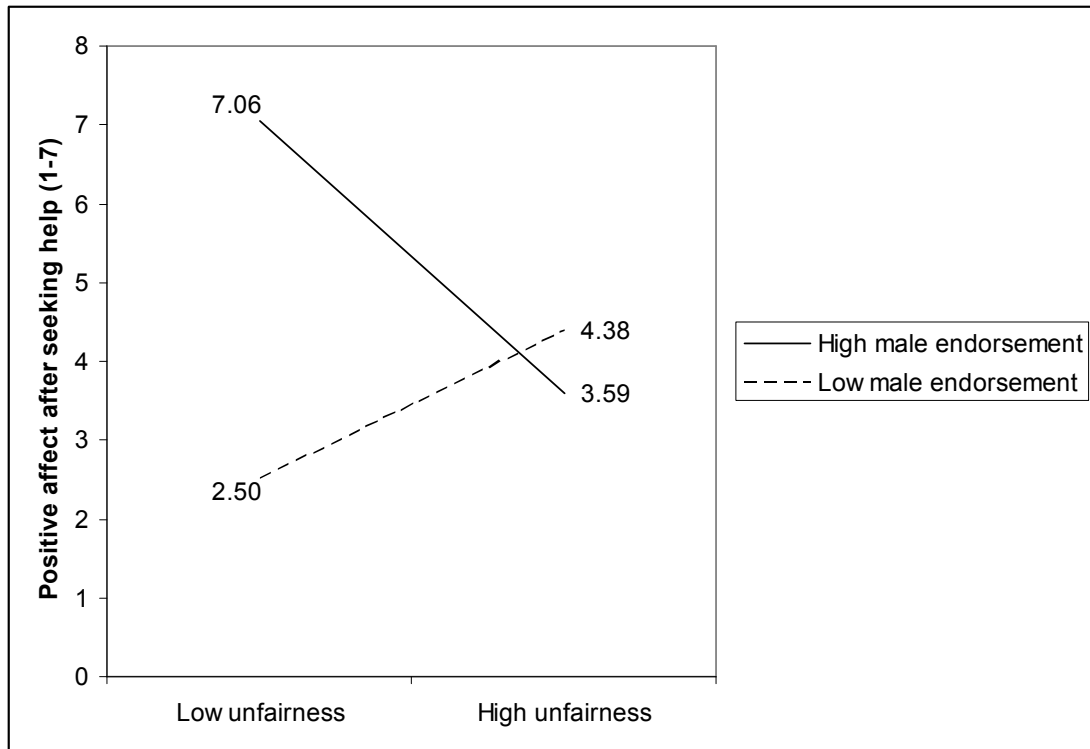


Figure 13. The moderating effect of perceived male stereotype endorsement on the relationship between perceived meta-stereotype unfairness and post-help-seeking positive affect, after controlling for experimental condition. Although one of the plot-points exceeds the maximum scale value of 7, this can occur legitimately in moderation analyses (Preacher, 2009).

Discussion

The significant main effect of Meta-Stereotype Status in the present study provides strong support for the strategic help-seeking hypothesis: female participants experiencing a salient dependency-related meta-stereotype sought significantly less help than those who did not experience this meta-stereotype. Since anagram-task performance did not differ across-condition, it can be inferred that the need for help was constant, suggesting that these differences in help-seeking levels reflect a strategic attempt to challenge the dependency-related stereotype. Moreover, since this effect was obtained via the utilization of a naturalistic method (a fabricated telephone

seeking data, because transforming the data did not alter the key main effect, and (as noted in previous studies) using non-transformed data makes interpretation easier.

call), the results of the present study provide particularly convincing evidence of the important role that salient meta-stereotypes can play in affecting group members' help-seeking.

Role of Identification Level

Contrary to the findings from previous studies, this main effect was not moderated by participants' identification level or situational identity salience. When examining this apparent inconsistency, it is important to consider the nature of the meta-stereotype and the way in which it was presented to participants in the present study. As mentioned in the study's Introduction, the phone-call manipulation required the adoption of a meta-stereotype that was well-understood, well-rehearsed and easily-accessible. The female dependency meta-stereotype appears to have met these criteria: combined with the phone-call manipulation, it produced a powerful main effect on help-seeking. However, this strong effect suggests that all women (regardless of identification level) were motivated to challenge the meta-stereotype, leading to identification not playing a moderating role. Although Study 2 utilized the same female-dependency meta-stereotype as the present study, it could be the case that the telephone-call manipulation is a particularly powerful and effective way of getting a meta-stereotype 'under the skin' of ingroup members (as it was intended to be), thereby making all members motivated to challenge it. This interpretation is supported by the fact that the variable measuring perceived meta-stereotype unfairness was very negatively skewed, indicating that participants generally perceived the meta-stereotype as highly unfair (Hopkins et al.'s (2007) precursor for meta-stereotype challenging behaviour). It therefore appears that the female dependency meta-stereotype was almost *too* effective in this study: by creating such a strong main effect, more subtle underlying issues (such as the moderating effect of

identification level) were possibly muted. Furthermore, the measures of identification (both pre- and post-manipulation) were strongly negatively skewed in the present study; something that did not occur in Study 2. Although it is not clear why this should be the case (especially for the pre-manipulation measure), this result could also help to explain why identification did not play a moderating role in the present study.

Source of Help Manipulation

The other key finding from the present study was that the nature of the helpers' group memberships did not interact with the main effect of Meta-Stereotype Status to affect participants' help-seeking. Although participants felt more similar to the ingroup helpers than to the outgroup helpers, Source of Help had no effect on participants' help-seeking behaviour. This suggests that seeking ingroup *or* outgroup help in the presence of a dependency-related meta-stereotype can be painful and costly (and are thus avoided to an equal extent): a result consistent with the second potential outcome described in the Introduction to this study.

The results from the conditional indirect effects analysis provide support for another Source of Help-related prediction outlined in the Introduction to this study: that the *nature* of these help-seeking-related costs differs depending on whether the help-source is categorized as ingroup or outgroup. Specifically, the analysis showed that, when the meta-stereotype was present, an outgroup source (compared to an ingroup source) led participants to consider men's dependency-related perceptions of women as more unfair, which, in turn, led to low levels of post-help-seeking affect (but only for participants who believed that men actually endorse the dependency stereotype).

This conditional indirect effect suggests that different processes were at work in the Ingroup Meta-Stereotype Present and Outgroup Meta-Stereotype Present

conditions. Although no conclusions can be drawn regarding the nature of the processes occurring in the Ingroup Meta-Stereotype Salient condition, it could be argued (as suggested previously) that the perceived unfairness variable taps into issues of group-related image threat; something that should be more prominent in the Outgroup Meta-Stereotype Salient condition than in the Ingroup Meta-Stereotype Salient condition. Such concerns then led to reduced post-help-seeking affect for participants who actually believed that men perceive women in dependency-related terms (i.e., for participants who endorsed JW's opinions about how men perceive women). The issue of helper group membership and group-related image concern is investigated in more depth in the next study.

Meta-Stereotypes and Female Sub-Groups

An additional element of note concerning the meta-stereotype manipulation in the present study involves the attempts to strengthen the manipulation by reducing problems related to female sub-groups. This issue was highlighted in Study 2, since it may have been the case that participants in the Meta-Stereotype Salient condition were able to protect themselves from the salient negative meta-stereotype by rationalising that '*men perceive some women as dependent, but not women like me*'. However, participants in the present study were presented with a specific example of a woman (JW; whom they were expected to perceive as similar to themselves), who defined herself as being the victim of male stereotyping. It was predicted participants would then conclude that '*women like me*' are at risk of being perceived as dependent by men (rather than merely '*other types of women*'). There is evidence to suggest that this attempt was successful: participants generally perceived themselves to be similar to JW in terms of sub-group membership. Moreover, although the result was tentative, participants felt marginally more similar to JW in the Meta-Stereotype Present

condition than in the Meta-Stereotype Absent condition. This may suggest that participants experienced a sense of social solidarity with JW after she concluded that she had been subjected to outgroup judgement (something which, based on their similarity to JW, they also had the potential to be affected by).

Future Directions

While the present study provided powerful evidence for the strategic help-seeking hypothesis in a relatively naturalistic context, the results obtained also raised questions which were not able to be fully answered by the data. Most notably, the present study did not shed light on the potential moderating role of participants' level of identification, and the conclusions regarding the experiential differences between seeking ingroup and outgroup help in the context of a salient meta-stereotype require further development. The next study is intended to address these outstanding issues. Furthermore, the next study is the first of three studies which, as a whole, are intended to provide a finer-grained analysis of the key concept of strategic behaviour. This involves investigating group members' *understandings* of what constitutes effective strategic behaviour, as well as the context-dependence of these understandings. These three studies conclude the thesis.

Chapter 11

Studies 5, 6 and 7: An examination of the strategies that group members perceive as effective at challenging specific meta-stereotype contents, and how these perceptions of efficacy translate into behaviour.

Overview of Studies 5, 6 and 7

Since the concept of strategy is key to this thesis (see Chapters 4 and 6), Studies 5, 6 and 7 were designed with the aim of providing a finer-grained investigation of this important idea. It should be remembered that the word ‘strategy’ has a specific meaning in this thesis (see Chapter 6): it describes behaviour carried out with the intention of managing or enhancing the ingroup’s image in the eyes of outgroups. One implication of this definition is that behaviour likely to be perceived as effective at managing the group’s image should differ depending on the context. More specifically, ingroup members’ perceptions of what constitutes effective strategic behaviour should depend on exactly how they believe the outgroup perceives the ingroup: while avoiding seeking outgroup help might be perceived as an effective image-management strategy in one context, it may not be perceived as effective in another context. With this in mind, the final three studies in this thesis were carried out with the intention of examining participants’ perceptions of what constitutes effective strategic behaviour in different contexts, and how these perceptions translate into behaviour.

Meta-Stereotype Contents

These studies involve an appreciation of the significance of the specific *contents* of a salient meta-stereotype for group members’ understandings of what

constitutes effective strategic behaviour. This aim speaks to an important issue which has not yet been explored in this thesis. Specifically, previous studies have focussed on encouraging participants to avoid seeking help, which was interpreted as strategic attempts to challenge a salient dependency-related meta-stereotype. Nonetheless, it could also be argued that this help-seeking avoidance merely indicated an attempt to avoid social interaction with an outgroup known to perceive the ingroup in negative terms.

If this was the case, then participants cannot be said to have been considering the specific contents of the meta-stereotype (and how best to challenge those contents through their behaviour). Instead, participants would be described as having reacted in an unthinkingly avoidant and defensive manner to every negative meta-stereotype they encountered, regardless of its contents. Clearly, this interpretation would not be consistent with the concept of ‘strategy’ (in the way it is defined in this thesis). Studies 5, 6 and 7 thus involved addressing this important concern. Specifically, these studies were intended to show that group members *do* take heed of the contents of salient meta-stereotypes when considering how best to challenge perceptions of the ingroup, and that such considerations impact upon their behaviour.

This investigation was achieved by manufacturing and manipulating the contents of the meta-stereotypes presented to participants, and then examining participants’ responses and reactions to these contents. For instance, if group members believed that the outgroup’s negative perceptions of the ingroup could be challenged effectively by *seeking* help, then it should be the case that outgroup help-seeking would increase. Such behaviour would indicate a desire to *engage* with the stereotyping outgroup (rather than simply to avoid it outright), suggesting that group members do consider the contents of salient meta-stereotypes when deciding how to

respond to an outgroup's negative perceptions of the ingroup. Studies 5, 6 and 7 investigate this idea.

Identification

A second aim of these studies was to explore the potential moderating effect of participants' ingroup identification in more depth. Although the role of identification (and situational identity salience) was observed in Studies 2 and 3, Study 4 did not reveal a moderating effect of identification on the relationship between Meta-Stereotype Status and help-seeking. As discussed previously, it could be the case that this moderating effect was muted because all participants were motivated to challenge the meta-stereotype (regardless of identification level). This may relate to the fact that the female dependency meta-stereotype made salient was well-known, easily-activated and widely perceived as unfair (e.g., Swim et al., 2001). With this in mind, Studies 5, 6 and 7 involved selecting a novel identity: participants' Dundee University student group membership. The Dundee University student identity is less socially-consequential than the female identity, and not automatically associated with well-known (and easily-activated) unfair stereotypes. It was therefore hoped that shifting to this novel identity would allow the role played by identification level in affecting participants' help-seeking behaviour to be revealed.

Summary of the Studies

Since the aims outlined above are complex and multi-faceted, Studies 5, 6 and 7 were conceptualised as an incrementally-progressing investigation of the concept of strategy. Specifically, it was intended that the exploration would develop over the course of the three studies, thereby enabling stronger conclusions to be reached than those afforded by a single study. The aim of each study (and, by extension, the nature of the incremental progression) is outlined below.

Study 5

The first of the three studies (Study 5) was intended to establish a suitable intergroup context (ingroup vs. outgroup) for use in Studies 6 and 7. Establishing this suitability involved the consideration of two elements. First, since Studies 6 and 7 required the utilization of meta-stereotypes with contents that could be manufactured and manipulated (see above), a key aim of Study 5 was to pinpoint an ingroup identity that would provide this level of meta-stereotype flexibility. Second, for Studies 6 and 7 to engage participants' identity-related concerns, participants would also have to feel motivated to protect the identity (i.e., those who identified highly with the ingroup should be willing to engage in strategic behaviour to protect it from outgroup threat). Study 5 was thus also designed to test whether the selected identity promoted and encouraged such behaviour.

As outlined above, the identity selected for use in Study 5 was participants' Dundee University student identity. There were three key reasons for this decision. First, this identity was not deemed to be automatically associated with any unfair stereotypes (at least not in the way that the female identity is, for instance). This lack of stereotype association was predicted to enable the manipulation of meta-stereotype content required in Studies 6 and 7. Second, since this identity was likely to be well-established (as opposed to a minimal group identity, for instance), participants who identified highly with their Dundee University student identity were expected to care enough about their group to be willing to protect it. Indeed, since the study took place within a university context, such feelings were predicted to be especially strong. Third, as outlined in the overview of these studies, it was hoped that shifting to the Dundee University student identity would enable the moderating role of identification to be revealed (since this novel identity is not associated with well-known unfair

stereotypes, reducing the likelihood of all participants being highly motivated to enhance the ingroup's image in the eyes of the outgroup).

Inevitably, selecting an ingroup identity of this nature also required careful attention to the nature of the outgroup. While it would have been possible to select a local rival outgroup university, there are two key problems associated with this idea. First, claiming falsely that real students at a specific local university stereotype Dundee University students in a negative manner could have ethical implications. Second, a potential problem with selecting a real outgroup (with a well-established history of interaction with the ingroup) is that it limits the range of meta-stereotypes that can be presented to participants. Since ingroup members are likely to have well-developed perceptions of how the outgroup perceives the ingroup, it could be difficult to encourage participants to accept experimentally-created meta-stereotypes in Studies 6 and 7.

For these reasons, the name of the stereotyping outgroup students' institution was fabricated (University College Edinburgh). Another key aim of Study 5 was thus to establish the suitability of this Dundee University/University College Edinburgh comparative context, and to ensure that it created enough group-related image threat to encourage participants to engage in strategic stereotype-challenging behaviour.¹

Study 6

After establishing the suitability of the (novel) comparative context in Study 5, Study 6 was conceptualised as an initial examination of participants' understandings of the concept of strategy. Due to the incremental nature of Studies 5, 6 and 7, Study 6 was designed to focus on participants' opinions regarding what constitutes effective strategic behaviour in different contexts. Specifically, Study 6 was intended to show

¹ Indeed, this was the logic behind the original 'minimal group' studies (e.g., Tajfel, 1970): by 'inventing' groups in the laboratory, experimenters had control over the contents of those groups and the meanings participants attached to group membership.

that the perceived efficacy of a specific meta-stereotype challenging behaviour (in this case, strategic help-seeking behaviour) is context-dependent. By presenting participants with one of two salient meta-stereotypes (one of which related to issues surrounding help-seeking, and one of which was unrelated to such issues), it was possible to investigate this context-dependence. As suggested above, whilst altering the extent of one's help-seeking behaviour might be perceived as an effective response in the context of one salient negative meta-stereotype, it might not be perceived as an effective response in the context of another salient negative meta-stereotype. Study 6 involved investigating these perceptions of efficacy.

Study 7

The final study in this thesis was intended to build on Study 6 by showing that group members are willing to engage in strategic help-seeking behaviour when the group's image is threatened, but only if such a response is deemed appropriate and effective in the current context. Using the same two salient meta-stereotypes as those presented in Study 6, participants were given the opportunity to seek outgroup help. The perceived efficacy results from Study 6 were therefore predicted to translate into actual strategic help-seeking behaviour in Study 7.

Taken as a whole, these studies were thus designed to provide an incrementally-progressing investigation of the concept of strategy. By investigating issues such as context-dependence and perceived efficacy of stereotype-challenging behaviours, these studies were intended to shed light on the complexity and subtlety of strategically-driven group-related helping transactions.

Study 5

As outlined above, the key aim of Study 5 was to establish a suitable intergroup comparative context for use in Studies 6 and 7. Moreover, Study 5 was intended to investigate the role of identification in more depth. This latter aim addresses an unresolved issue from Study 4 (since identification was not found to be a moderating variable in Study 4). As suggested above, it may have been the case that all participants were highly motivated to challenge the meta-stereotype in Study 4 (since the stereotype is well-known and generally perceived as unfair), meaning that the moderating effect of identification was muted. By using an identity which is less bound-up with well-known unfair meta-stereotypes (Dundee University students), the present study should thus enable the role of identification to be revealed.

Study 5 has a final aim which also involves investigating an issue from Study 4 in more depth. This relates to the conclusion forwarded in Study 4 to suggest that, in the context of a salient meta-stereotype, intergroup and intragroup help-seeking contexts both have the potential to be costly (but for different reasons). Specifically, Study 4 revealed that, when the meta-stereotype was salient, an intergroup comparative context (compared to an intragroup comparative context) motivated greater feelings of meta-stereotype unfairness. This was interpreted as evidence to suggest that the Outgroup Helper condition led to stronger group-related image concerns than the Ingroup Helper condition (with this then leading to low post-help-seeking affect, but only for participants who believed that men actually endorse the meta-stereotype). The present study was thus designed with the additional aim of comparing in more depth the different help-seeking-related experiences of participants in the Ingroup Helper and Outgroup Helper conditions. To this end, a

more explicit measure of group-related image concern was included in the present study.

Design and Predictions

The present study has two overarching aims: establishing a suitable comparative context for use in Studies 6 and 7 and investigating issues from Study 4 in more depth (i.e., the moderating role of identification and the relevance of the helper's group membership). Both these elements informed the study's design.

In terms of the first element (regarding the establishment of a suitable comparative context), the present study was the first step in an incrementally-progressing analysis of strategic behaviour. With this incremental approach in mind, the present study was *not* intended to manipulate the specific contents of participants' meta-stereotypes (although this manipulation is central to both Studies 6 and 7). Instead, the present study was designed to assess the suitability of the selected intergroup context (Dundee University students vs. University College Edinburgh students). This was achieved by investigating whether (highly-identifying) Dundee University students would be motivated to engage in strategic help-seeking in a context of general outgroup judgement. *All* participants were therefore encouraged to consider the idea that the outgroup judges the ingroup in a non-specified manner, before being faced with either ingroup helpers (Dundee University students) or outgroup helpers (University College Edinburgh students) during an anagram task. As outlined in Chapter 6, previous research has shown that even a non-specified sense of outgroup judgement is sufficient to encourage strategic image-related behaviour: van Leeuwen and Oostenbrink (2005) found university students were more likely to provide directions to a 'lost' confederate from another university when he was

apparently writing a thesis on how his university views the participants' university, rather than on a neutral topic.

In terms of the second element (concerning issues raised in Study 4), it should be remembered that while a general sense of outgroup judgement was made salient in the present study, Study 4 involved making a *specific* meta-stereotype salient. It could be argued that this inconsistency limits the inferences that can be made from the present study to Study 4. Nonetheless, van Leeuwen and Oostenbrink's work suggests that image-related concerns are still activated and relevant in a context of general outgroup judgement. This means that the design of the present study should still enable the role of identification level and the different help-seeking experiences of Ingroup Helper condition and Outgroup Helper condition participants to be investigated in more depth.

Overview

To create a sense of general outgroup judgement, participants in both conditions were presented with a list of positive and negative traits (none of which related explicitly to help-seeking), and were asked to rate the extent to which the outgroup perceived the ingroup as possessing each trait. Applying van Leeuwen and Oostenbrink's (2005) logic (see above) to the domain of group-image-related help-seeking behaviour, it was predicted that the more participants identified with their Dundee University student status, the less help they would seek in a context of general outgroup judgement. This is because seeking help in such a context would risk highlighting negative traits such as dependency and incompetence (see too Lee, 2002). Obtaining this result would thus provide additional support for the idea that help-seeking is perceived as a method for reducing group-related evaluative concerns. As discussed above, this result would also indicate the suitability of the Dundee

University/University College Edinburgh comparative context for use in Studies 6 and 7.

Furthermore, acquiring this result would help clarify the role played by identification level in affecting participants' help-seeking behaviour in such contexts (something that remains an outstanding issue after the previous study). By obtaining a negative correlation between identification and willingness to seek help, the present study would highlight the fact that identification level has important implications for how group members respond to outgroup judgement. Since high identifiers should be most invested in the group (e.g., Ellemers et al., 2002), these individuals should also be most willing to protect the group's image in a context of outgroup judgment (in this case, by avoiding seeking help). This finding would thus be consistent with social identity-related predictions regarding the behaviour of highly-identifying group members.

Based on the results of the previous study, this relationship between identification and help-seeking was not predicted to be moderated by Source of Help (i.e., the acts of seeking ingroup and outgroup help were predicted to be perceived as equally costly). However, as suggested in the previous study, participants' *experiences* of the help-seeking episode (measured in terms of post-help-seeking affect) were predicted to differ depending on the Source of Help. The present study was intended to investigate such issues by comparing the help-seeking-related experiences of participants in the Ingroup Helper and Outgroup Helper conditions in more depth.

To achieve this, participants in the present study were presented with a more explicit measure of group-related image concern. This variable was intended to measure individual differences (rather than between-condition differences) in the

extent to which participants experienced group-related image concerns, since, unlike the previous study, all participants in the present study experienced outgroup judgement (although not all participants sought help from the outgroup). Based on the findings from the previous study regarding the indirect effect of the Source of Help manipulation on post-help-seeking affect, it was expected that, in the present study, Source of Help would moderate the effect of image concern on affect. Specifically, high levels of concern were predicted to translate into more negative post-help-seeking affect in the Outgroup Helpers condition (where seeking help has the potential to threaten the ingroup's image in an intergroup context) than in the Ingroup Helpers condition (where seeking help only has the potential to threaten the group member's personal image in an intragroup context). In other words, while participants facing outgroup helpers should experience concern regarding how their help-seeking might affect perceptions of the ingroup as a whole, such concerns should not be activated for participants facing ingroup helpers. This should have implications for participants' experiences of the helping transaction (i.e., more negative in the Outgroup helpers condition).

Method

Participants and Design

University of Dundee undergraduates ($N = 105$) were assigned randomly to two between-groups experimental conditions (Ingroup Helpers condition $N = 60$ and Outgroup Helpers condition $N = 45$). A two-study cover story was used to achieve this without participants becoming aware of the study's true purpose. The 'first' study was intended to create a salient intergroup context, while the 'second' contained the experimental manipulations and dependent measures. To reduce complexities

surrounding gender roles and helping (e.g., Eagly & Crowley, 1986), only females were recruited.

One participant (in the Outgroup Helpers condition) explained she was dyslexic, while two participants (one in each condition) described themselves as non-native speakers of English. These participants were removed from the analysis. Furthermore, one participant (in the Ingroup Helpers condition) had to leave the laboratory half-way through the study due to a fire drill. Meanwhile, one participant (in the same condition) failed to complete the items in the first part of the study that investigated participants' beliefs about how Dundee University students are perceived by University College Edinburgh students. These two individuals were also removed from the analysis. Finally, 13 participants failed the manipulation check that enquired about the identity of the potential helpers (one in the Outgroup Helper condition and 12 in the Ingroup Helper condition), while 10 participants (three in the Outgroup Helper condition and seven in the Ingroup Helper condition) expressed hypothesis-related suspicions regarding the true purpose of the experiment (i.e., they noted the link between student identity and help-seeking when asked to describe what they felt to be the aim of the study). These individuals were also excluded from the analysis. This left 77 participants (Ingroup Helper condition $N = 38$; Outgroup Helper condition $N = 39$; $M_{\text{age}} = 19.69$ years, $SD = 5.55$, age range = 17-50 years).

Participants were recruited through an online course credit scheme, and were therefore not aware that they were required to be female Dundee University students to participate in the study (thereby reducing the chance of them becoming suspicious about the study's true aim). Participants received either a small monetary payment or partial course credit in return for their participation.

Procedure and Measures

Participants were tested individually in a laboratory. After being brought to the laboratory by the experimenter (JW; a female Dundee University student), participants completed two short studies. In reality, both studies were connected. All items were measured on 1-7 scales, unless otherwise stated (see Appendix 6 for experimental materials).

Participants were told the ‘first’ study was JW’s study, while the ‘second’ was being carried out by Final Year students at Dundee University (in the Ingroup Helpers condition) or University College Edinburgh (in the Outgroup Helpers condition). The name University College Edinburgh was fabricated for the purposes of the study, but was pilot-tested to ensure it sounded plausible and high-status (thereby enhancing feelings of judgement and group-image threat, e.g., Nadler, 2002).² Indeed, the city of Edinburgh was selected because it is geographically close to Dundee, and enjoys high levels of prestige and wealth within Scotland.

JW explained she had only ever communicated with the students via email (to ensure participants did not think there was any prior relationship between her and the students), and she was helping them recruit participants for their dissertation research.

Creating an Intergroup Context (‘Study 1’)

The ‘first’ study was a paper-and-pencil questionnaire entitled “What are Your Opinions of Your University?”. JW explained she was interested in how students from Dundee University and University College Edinburgh perceive their respective institutions. The role of this questionnaire was to promote an intergroup comparative context (with Dundee University students as the ingroup and University

² This name was pilot-tested beforehand, along with four other potential names (*Robert Adamson University Edinburgh*, *University of the East of Scotland*, *University of the Lothians and Forth Valley University*). The pilot study involved male and female undergraduate students ($N=29$). *University College Edinburgh* was found to be the most plausible name ($M = 4.86$, $SD = 1.46$ on a 1-7 scale), which was marginally higher than the second most plausible: *Robert Adamson University Edinburgh* ($M = 4.17$, $SD = 1.61$; $t(28) = -1.76$, $p = .089$, $d = -0.45$).

College Edinburgh students as the outgroup). The front cover indicated this version of the questionnaire was intended for Dundee University students, implying that a separate version was available for University College Edinburgh students. In reality, this phrasing was used to enhance the intergroup context: only one version of the questionnaire was actually produced. The questionnaire also featured images of the Dundee University crest and the (fabricated) University College Edinburgh crest, which were intended to help present University College Edinburgh as a bona fide institution, and to enhance the intergroup comparative context.

Initially, participants received ‘background information questions’, asking about their year and subjects of study at Dundee University. In reality, these items were used to maintain the cover story and to make participants’ Dundee University student identity salient.

Identification. To enhance this salience, participants rated their agreement with six items adapted from Doosje, Ellemers and Spears (1995), (e.g., *I see myself as a Dundee University student*; 1 = *disagree* and 7 = *agree*). The items were combined to form an identification measure ($M = 5.56$, $SD = 0.78$, *Cronbach’s* $\alpha = .76$).

Ingroup traits. To further enhance the intergroup comparative context and to create a general sense of outgroup judgement, participants were then presented with four positive traits (*hard-working, fun-loving, polite and intelligent*) and four negative traits (*lazy, aggressive, selfish, and inferior*), and rated the extent to which University College Edinburgh students were likely to describe Dundee University students in terms of each of the traits (1 = *not at all* and 7 = *very much*). The positive items were

reversed and combined with the negative items to create a negative judgement scale ($M = 3.06$, $SD = 0.82$, *Cronbach's* $\alpha = .77$).³

Ingroup favouritism. To measure ingroup favouritism, participants estimated the average overall academic performance of Dundee University students (compared to University College Edinburgh students) by selecting a response from a 9-point rating scale. This ranged in 5% increments, from *20% worse academic performance than University College* to *20% better academic performance than University College*. The scale had *Same as University College* at the mid-point. This item was coded as ranging from -4 to +4, with 0 as the mid-point ($M = 0.17$, $SD = 1.34$).

Status disparities. Participants also rated the relative societal status of Dundee University students (compared to University College Edinburgh students) by selecting a response from a 9-point rating scale. Again, this ranged in 5% increments, from *20% lower societal status than University College* to *20% higher societal status than University College* (with *Same as University College* at the mid-point). As before, this item was coded as ranging from -4 to +4, with 0 as the mid-point ($M = -0.16$, $SD = 1.43$).

Opinions. Finally, in order to maintain the cover-story and to enhance group salience, participants were asked to write down their opinions and perceptions of Dundee University and its students. This concluded the 'first' study.

Manipulations and Dependent Measures ('Study 2')

JW then described the 'second' study. She explained that the Final Year students were interested in the strategies people use to solve anagrams. In reality, the second study aimed to manipulate the group membership of the potential helpers and to measure help-seeking, as well as some additional variables. In the Ingroup

³ Although *fun-loving* could be perceived as a negative trait in the context of university students, factor analysis revealed it to load positively.

condition, the Final Year students were described as being from Dundee University, while in the Outgroup condition they were described as being from University College Edinburgh.

Participants were asked to walk to the opposite side of the laboratory and to sit down in front of a desktop computer, so they could complete the study (it was hoped this action would reinforce the idea that the ‘second study’ was both physically and psychologically separate from the ‘first study’). JW explained that although the student researchers were not nearby, they would be able to see and respond to participants’ answers in real-time, via computer. As in the previous study, this immediacy was emphasised by leaving a (disconnected) webcam on-top of the computer monitor. The identity and status of the respondents were reinforced by displaying either the crest of Dundee University or the (fabricated) crest of University College Edinburgh on the introductory screen of the questionnaire. In reality, participants were given responses that had been pre-programmed using MediaLab software. All questions were presented on-screen, and participants inputted all their responses via the keyboard.

Participants indicated the name of their university, and listed the subjects they studied. Including these items made it clear that the student researchers knew the participants were Dundee University students.

Anagram task. Participants were presented with the 10 anagrams from the previous study to attempt in 90 seconds.

Dependent variable: help-seeking. Participants were told that one potential anagram-solving strategy might be to ask for more information on the anagrams, and that they were able to do this if they wanted. Participants could then request as much or as little help as they wished on each anagram from the ostensible student

researchers. For each anagram, participants could choose from one of four levels of assistance (*none, a small hint, a large hint and a full answer*). The Final Year students would ostensibly be able to see these requests, and send back any help required via computer. Participants were told they would have more time to work on the anagrams at a later point.

Defining 'help-seeking'. Since help-seeking in the previous anagram studies (Studies 2 and 4) was defined as the percentage of *large hints* combined with the percentage of *full answers*, this definition was also adopted in the present study. Using this definition meant that 98.70% of participants (i.e., all but one participant in the Outgroup Helpers condition) sought help (regardless of the extent of that help).⁴

Four participants each solved one of their anagrams incorrectly (*honey as enjoy, carnation as raincoat, restaurant as saturation and raspberries as irreplaceable*), and then proceeded to seek no help on any of these items. Using the same criteria as in previous studies, it was assumed that these participants believed they had solved these anagrams correctly (and thus required no help for these items). These anagrams were therefore counted as being answered, and were thus not included in the analysis of help-seeking behaviour.

Measuring additional variables. After being asked to note down any strategies they had used to help them solve the anagrams (in order to maintain the cover-story), participants completed a number of additional items, which were identical in both conditions. Mood was measured with two seven-point bipolar scales (*very bad/very*

⁴ Although the predominant reason for adopting the '*large hints plus full answers*' definition of help-seeking in the present study was to ensure consistency with Studies 2 and 4, it should be noted that the levels of help-seeking observed in the present study did create a similar pattern to those observed in Studies 2 and 4. As in these studies, the percentage of *full answers* sought on unanswerable anagrams was very low (9.38%). Moreover, very few responses on unanswerable anagrams were for *no help* (0.78%). Thus, as in Studies 2 and 4, defining 'help-seeking' as *full answers* or as *small hints plus large hints plus full answers* risked floor and ceiling effects respectively. Instead, combining *large hints* (62.79%) and *full answers* (9.38%) produced a more acceptable value (72.17%). These results help to vindicate the decision to define 'help-seeking' as *large hints plus full answers* in the present study.

good and *very negative/very positive*), which were combined to form a positive affect scale ($M = 3.43$, $SD = 1.24$; $r = .78$, $N = 77$, $p < .001$).

Participants rated their similarity to the student researchers using four items (e.g., *How similar are we to you?*; 1 = *not at all* and 7 = *very much*), which were combined to form a scale ($M = 4.57$, $SD = 0.88$, *Cronbach's* $\alpha = .81$). Participants also rated their similarity to JW with a single item ($M = 4.38$, $SD = 1.21$).

Participants' perceptions of the experimental situation were measured with four items adapted from Study 3. Two items measured the extent to which participants felt as though they were acting and were evaluated as Dundee students (1 = *completely as an individual* and 7 = *completely as a Dundee University student*). Participants also rated the extent to which they felt as though they were representatives of the group 'Dundee University students' interacting with representatives of the group 'University College Edinburgh students' (Outgroup Helpers condition) or 'fellow Dundee University Students' (Ingroup Helpers condition), (1 = *not at all* and 7 = *very much*). Using the same scale, participants rated the extent to which they felt they were unique individuals interacting with other unique individuals. The *acting as individuals* item was reversed and combined with the other items to form an overall group context scale ($M = 3.72$, $SD = 1.14$, *Cronbach's* $\alpha = .73$). This scale was also conceptualised as a measure of situational identity salience.

Four items measured the extent to which participants were concerned about the ingroup's image in the eyes of others (e.g., *I care about what other people think about Dundee University students*; 1 = *not at all* and 7 = *very much*). The items were combined to form a group-related image-concerns scale ($M = 5.06$, $SD = 1.07$, *Cronbach's* $\alpha = .89$).

Two additional items measured the extent to which participants felt that asking for assistance would damage ($M = 2.45$, $SD = 1.30$) and would improve ($M = 2.96$, $SD = 1.38$) how Dundee University students are perceived by others. Participants also rated the extent to which asking for assistance would reinforce negative stereotypes people hold about Dundee University students with a single item ($M = 2.47$, $SD = 1.15$).

Finally, participants completed the same six identification items they answered in the ‘first’ study. These were combined to form a second identification scale ($M = 5.39$, $SD = 0.87$, *Cronbach’s* $\alpha = .85$).⁵ The two measures of identification correlated ($r = .79$, $N = 77$, $p < .001$), so were combined to form an overall identification scale ($M = 5.48$, $SD = 0.87$, *Cronbach’s* $\alpha = .89$). Unless otherwise stated, any analyses involving level of identification will refer to this combined scale. After being asked to indicate the group membership of the potential helpers and to write down what they felt to be the aim of the study, participants were debriefed and compensated.

Results

Help-Seeking

The between-condition difference in overall levels of help-seeking was non-significant (Ingroup Helpers $M = 73.77$, $SD = 24.68$; Outgroup Helpers $M = 70.62$, $SD = 27.41$; $t(75) = -0.53$, $p = .60$, $d = -0.12$), (the between-condition means and standard deviations for the key variables can be found in Table 22).

⁵ Note that it is not appropriate in the present study to define these as pre-manipulation and post-manipulation measures of identification. Before receiving the initial identification items, participants were informed that the ‘second’ study was being carried out by Dundee University students (Ingroup Helpers condition) or University college Edinburgh students (Outgroup Helpers condition). Since elements of the manipulation had occurred before this first measure of identification, it cannot be considered a pre-manipulation measure. Instead, these measures will be referred to as the ‘first’ and ‘second’ measures of identification.

Identification

Overall (i.e., collapsing across conditions) analysis showed a significant negative correlation between ingroup identification and help-seeking ($r = -.23$, $N = 77$, $p = .049$): regardless of condition, high ingroup identifiers sought lower levels of help.⁶ This relationship was somewhat stronger in the Ingroup Helpers condition: $r = -.29$, $N = 38$, $p = .08$, than in the Outgroup Helpers condition: $r = -.15$, $N = 39$, $p = .36$). However, the difference between these two correlations was non-significant ($z = -0.62$, $p = .53$).⁷

⁶ For completeness, the correlation between identification and help-seeking was also calculated with the first measure of identification only (to ensure the effects obtained reflected chronic individual differences in participants' identification, rather than being the product of the experimental manipulations). The pattern did not change, although the relationship became slightly weaker (overall $r = -.21$, $N = 77$, $p = .07$; Ingroup Helpers $r = -.25$, $N = 38$, $p = .15$; Outgroup Helpers $r = -.15$, $N = 39$, $p = .37$). No such correlation with help-seeking was found for the measure of situational identity salience ($r = .04$, $N = 77$, $p = .76$).

⁷ The skew and kurtosis values of the key help-seeking measure were analysed by dividing the two values by their respective standard errors. The resultant values were then compared to Field's (2005) critical values. Although the kurtosis value was acceptable ($z = 0.11$, $p > .05$), the data were found to be negatively skewed ($z = -3.33$, $p < .001$). For completeness, the data were transformed and re-analysed. Although the three main methods of transformation were attempted (log-10, square-rooting and reciprocal transformation), (Field, 2005), square-rooting was the only transformation that did not worsen the distribution, so the square-rooting method of transformation was used. When the transformed skew and kurtosis values were divided by their respective standard errors, both of the resultant values were non-significant ($z_{\text{skew}} = 0.62$; $z_{\text{kurtosis}} = -1.73$, $ps > .05$), indicating that the square-root transformation improved the distribution of the help-seeking data. As was the case with the non-transformed data, overall levels of help-seeking did not differ significantly between-condition (Ingroup Helpers' $M = 5.81$, $SD = 2.99$, Outgroup Helpers' $M = 5.43$, $SD = 2.95$; $t(75) = -0.57$, $p = .57$, $d = -0.13$). Additionally, the correlation between identification and help-seeking was significantly negative ($r = -.24$, $N = 77$, $p = .03$; Ingroup Helpers: $r = -.28$, $N = 38$, $p = .09$, Outgroup Helpers: $r = -.19$, $N = 39$, $p = .25$). Incidentally, when only the first identification measure was used (to ensure the effects obtained reflected chronic individual differences in participants' identification, rather than being the product of the experimental manipulations), these results became weaker ($r = -.22$, $N = 77$, $p = .05$; Ingroup Helpers: $r = -.23$, $N = 38$, $p = .17$; Outgroup Helpers: $r = -.20$, $N = 39$, $p = .22$). Overall, these analyses indicate that the results obtained using the transformed data were largely similar to the results obtained using the untransformed data. Due to the transformation not changing the overall pattern of the data (and due to the concerns raised in earlier studies about transforming data), the non-transformed data were used.

Table 22.

Condition means and standard deviations for major variables.

Variables (all 1-7, unless stated)	Experimental Condition			
	Ingroup Helpers		Outgroup Helpers	
	M	SD	M	SD
Help-seeking (% large + % full)	73.77	24.68	70.62	27.41
Positive affect	3.58	1.36	3.28	1.10
Perceived similarity to researchers	4.42	0.78	4.72	0.95
Perceived similarly to JW	4.18	1.23	4.56	1.19
Situational identity salience.	3.89	1.05	3.55	1.21
Pre-manipulation identification	5.30**	0.85	5.82**	0.61
Post-manipulation identification	5.11**	0.89	5.66**	0.77
Combined pre/post identification	5.21**	0.82	5.74**	0.64
Extent to which participant cares about ingroup image	5.05	1.08	5.08	1.07
Extent to which help-seeking damages the ingroup's image	2.68	1.36	2.23	1.22
Extent to which help-seeking improves the ingroup's image	3.11	1.35	2.82	1.41
Extent to which help-seeking reinforces ingroup stereotypes	2.50	1.13	2.44	1.19
Overall academic performance of Dundee students compared to Uni. College Edinburgh students ^a	0.05	1.27	0.28	1.41
Relative status of Dundee students compared to Uni. College Edinburgh students ^a	-0.25	1.42	-0.08	1.46

a = -4 to +4 scale, ** = $p < .01$.*Concern for the Ingroup's Image*

Concern for the ingroup's image in intergroup situations did not differ between-condition (Outgroup Helpers $M = 5.08$, $SD = 1.07$; Ingroup Helpers $M = 5.05$, $SD = 1.08$, $t(75) = 0.13$, $p = .90$, $d = 0.03$). The more participants identified with the ingroup, the more they were concerned about the group's image ($r = .38$, $N = 77$, $p = .001$). This correlation was obtained regardless of condition (although it was stronger in the Outgroup Helpers condition: $r = .50$, $N = 39$, $p = .001$ than in the

Ingroup Helpers condition: $r = .32$, $N = 38$, $p = .05$, the difference between these correlations was non-significant, $z = 0.92$, $p = .36$).⁸

Affect: Conditional Indirect Effects Analysis

Post-help-seeking affect did not differ between-condition (Ingroup Helpers $M = 3.58$, $SD = 1.36$; Outgroup Helpers $M = 3.28$, $SD = 1.10$, $t(75) = -1.05$, $p = .30$, $d = 0.24$), and was unrelated to levels of help-seeking ($r = -.06$, $N = 77$, $p = .63$).

However, post-help-seeking affect was expected to reflect the extent to which participants were concerned about the ingroup's image. Since group-related image concerns were expected to be activated most strongly in participants who identified highly with the ingroup, the image concerns variable was conceptualised as a mediator of the relationship between identification and post-help-seeking affect. Specifically, high levels of ingroup identification were predicted to promote high levels of image concern, with this then translating into low post-help-seeking affect in the Outgroup Helpers condition, but not in the Ingroup Helpers condition. This prediction emerged from the idea that seeking outgroup help had the potential to threaten the ingroup's image in an intergroup context (thereby risking the confirmation of these participants' group-related image concerns, which was likely to make them experience negative affect). Meanwhile, seeking ingroup help only had the potential to threaten the group member's image in an intragroup context (thereby not risking the confirmation of such concerns). This prediction was based on two elements: i) the results of the conditional indirect effects analysis in the previous study (Study 4), and ii) the fact that all but one participant sought help in the present study. This latter meant that almost all participants had the potential to feel help-

⁸ When only the first identification measure was considered (to ensure the effects obtained reflected chronic individual differences in participants' identification, rather than being the product of the experimental manipulations), the pattern of results remained the same but became weaker (overall $r = .25$, $N = 77$, $p = .03$; Outgroup Helper $r = .40$, $N = 39$, $p = .01$; Ingroup Helper $r = .17$, $N = 38$, $p = .32$).

seeking-related threat, thereby enabling the link between image-related threat and low-post help-seeking affect to be established. In summary, obtaining this predicted result would support the idea that participants' experiences of seeking help in the context of outgroup judgement differ depending on the source of that help.

These predictions were tested with conditional indirect effects analysis (Preacher et al., 2007, see Figure 14 for the model tested). The Independent Variable was level of identification, the Dependent Variable was post-help-seeking affect, the mediator was image-related concerns and the moderator was experimental condition (Ingroup Helpers vs. Outgroup Helpers).

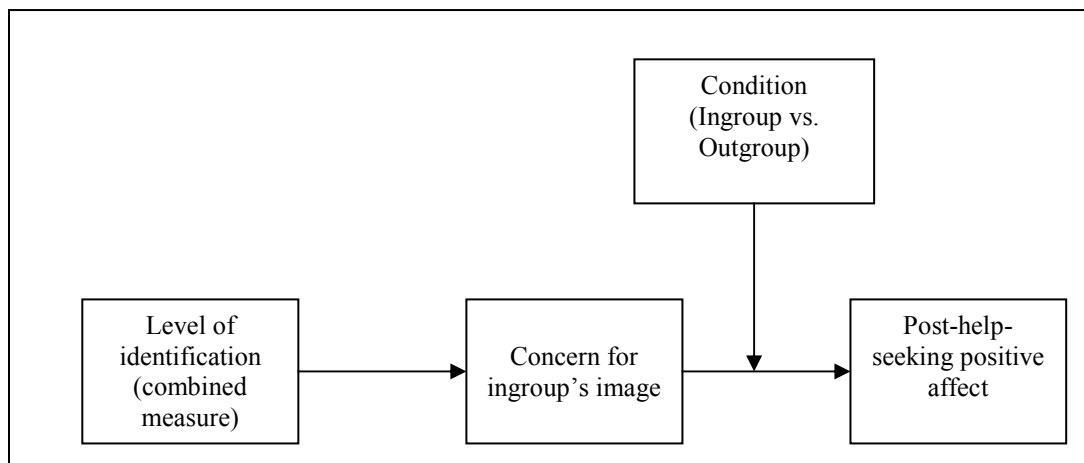


Figure 14. The conditional indirect effects model.

Both the key paths in the model were found to be significant (see Appendix 1 for statistical details): i) Independent Variable to mediator: level of identification positively predicted the extent to which participants were concerned about the ingroup's image in intergroup situations, regardless of condition ($coeff. = .38$, $SE = .11$, $t = 3.52$, $p < .001$; see Table 23, second row), and ii) the interaction between the mediator and moderator to the Dependent Variable: the interaction between concern

for the ingroup's image and experimental condition predicted post-help-seeking affect ($coeff. = 0.23$, $SE = .11$, $t = 2.04$, $p = .045$; see Table 23, seventh row). This indicates that the effect of identification on affect via concern for the ingroup's image was moderated by experimental condition.

Table 23.

Results of the conditional indirect effects analysis, with experimental condition as the moderator.

Predictor	<i>Coeff.</i>	<i>SE</i>	<i>t</i>
DV = Care about ingroup image (the mediator in the model)			
Constant	0.00	0.11	0.00
Identification level (combined)	0.38	0.11	3.52**
DV = Post-help-seeking affect (the DV in the model)			
Constant	0.003	0.11	0.03
Identification level (combined)	0.19	1.45	0.15
Condition	0.18	0.12	1.53
(Interpersonal vs. Meta-Stereotype)			
Care about ingroup image	-0.10	0.12	-0.85
Care x condition	0.23	0.11	2.04*

** = $p < .01$, * = $p < .05$.

Bootstrapping Analysis

To investigate the significant moderating effect of experimental condition on the relationship between identification level and affect via concern for the ingroup's image in more depth, bootstrapping analysis was used. The size of the conditional indirect effect was estimated at the two levels of the moderator variable (i.e., Ingroup Helpers vs. Outgroup Helpers), (Preacher et al., 2007). The recommended number of 5000 bootstrap samples was used (Preacher & Hayes, 2004). Bias corrected and accelerated 95% confidence intervals revealed a significant ($p < .05$) indirect effect of

level of identification on affect via image concerns when the potential helpers were outgroup members (*Upper CI* = -0.30; *Lower CI* = -0.02), but not when they were ingroup members (*Upper CI* = 0.23, *Lower CI* = -0.09). These results indicate that, as predicted, high levels of identification led participants to care strongly about the ingroup's image, which in turn led to low levels of post-help-seeking affect when participants were to receive outgroup help (but not when they were to receive ingroup help).

Simple slopes analysis. To enable the nature of the moderating effect of experimental condition in the latter part of the conditional indirect effects model (i.e., between *concern for the ingroup's image* and *affect*) to be examined, a regression analysis was carried out after controlling for the effect of identification. This was achieved by also entering the (standardized) identification variable into the first block of the regression; see Appendix 1 for statistical details. Confirming the results above, the interaction between standardized concern for the ingroup's image and standardized experimental condition predicted affect, $R^2 = 0.92$, $\Delta R^2 = 0.53$, $F(1, 72) = 4.17$, $p = .045$. This interaction was then plotted using simple slopes analysis (Preacher et al., 2006, see Figure 15). Consistent with predictions, participants who cared more about the ingroup's image in the eyes of others experienced lower post-help-seeking affect than those who cared less, but only when the potential helpers were outgroup members (*simple slope* = -.41, $SE = .21$, $t = 2.00$, $p = .049$), rather than ingroup members (*simple slope* = .16, $SE = .21$, $t = 0.77$, $p = .44$; see Figure 15). High identifiers therefore cared highly about the ingroup's image, which in turn led to low

post-help-seeking affect (but only for participants who faced outgroup helpers, rather than ingroup helpers).⁹

⁹ For completeness, the analysis was repeated with the first measure of identification only (to ensure the effects obtained reflected chronic individual differences in participants' identification, rather than being the product of the experimental manipulations). The pattern did not change: identification predicted care for the group's image (*coeff.* = 0.25, *SE* = 0.11, *t* = 2.25, *p* = .03), and the effect of care for the group's image on affect was moderated by condition (*coeff.* = 0.23, *SE* = 0.11, *t* = 2.04, *p* = .04). 95% bias corrected and accelerated confidence intervals confirmed a significant indirect effect of level of identification on affect via image concerns when the potential helpers were outgroup members (*Upper CI* = -0.22; *Lower CI* = -0.003) rather than ingroup members (*Upper CI* = 0.20, *Lower CI* = -0.05). The regression analysis revealed that (after controlling for identification), the interaction between care for the ingroup's image and experimental condition significantly predicted affect, $R^2 = 0.80$, $\Delta R^2 = 0.53$, $F(1, 72) = 4.18$, $p = .045$. Plotting this interaction using simple slopes analysis revealed that participants who cared more about the ingroup's image in the eyes of others experienced lower post-help-seeking affect than those who cared less, but only when the potential helpers were outgroup members (*simple slope* = -.37, *SE* = .21, *t* = -1.78, *p* = .08), rather than ingroup members (*simple slope* = .21, *SE* = .20, *t* = 1.05, *p* = .30).

Moreover, the data were found to meet the assumptions of regression analysis. An outlier analysis was also performed, and no cases were found to have a standardized residual that was more than two standard deviations from the regression line. However, 14 cases were found to have leverage values that exceeded criterion of twice the average leverage value of the sample, (Hoaglin & Welsch, 1978). Removing these cases and repeating the moderation analysis produced a marginally significant result ($R^2 = 0.10$, $\Delta R^2 = 0.05$, $F(1, 58) = 3.00$, $p = .09$). Since the interaction remained marginally significant with these cases removed, it was decided that no cases were having an unduly large effect on the results, and that the moderation could be interpreted legitimately.

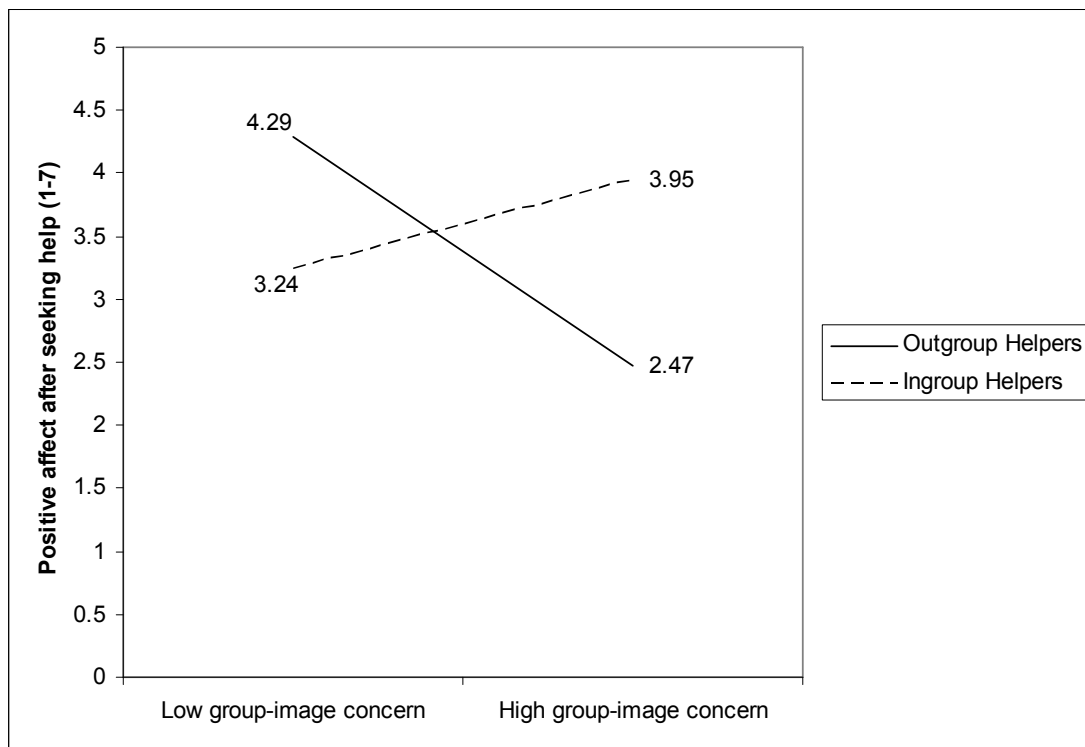


Figure 15. The moderating effect of experimental condition on the relationship between concern for the ingroup's image and affect, after controlling for level of identification (combined measure).

Discussion

The aim of the present study was two-fold: i) to address two issues from the previous study in more depth (the first involving the role of identification level and the second involving the experiential differences between seeking ingroup and outgroup help in the context of outgroup judgement), and ii) to establish the suitability of a specific intergroup comparative context for use in Studies 6 and 7. Both of these aims were addressed successfully.

Addressing Study 4 Issues

Identification Level

In terms of addressing issues from Study 4 in more depth, these data show that (across conditions) the more participants identified with the ingroup, the less help

they sought. This provides correlational support for the (predicted) role played by identification-level in affecting participants' strategic help-seeking behaviour (i.e., that higher identifiers are more likely to attempt to protect or enhance the ingroup's image in a context of outgroup judgement). It is likely that this effect of identification is more apparent than in Study 4 because of the choice of Dundee University student identity: using a less socially-consequential identity involving fewer commonly-known stereotypes enabled identification effects to be revealed more readily. This vindicates the shift from female identity in the previous study to Dundee University student identity in the present study.

Ingroup vs. Outgroup Help

In terms of the differences between seeking ingroup and outgroup help, the present study's results were consistent with the previous study in revealing no effect of helper group membership on help-seeking. It therefore appears (as suggested in the previous study) that asking for help from both ingroup and outgroup members in the context of outgroup judgement can be costly. However, the present study strengthens and extends the conclusions forwarded in the previous study regarding participants' differing experiences of seeking ingroup and outgroup help in the context of outgroup judgement. Specifically, the present study provides stronger evidence of the role played by group-related image concerns in affecting participants' post-help-seeking affect: high identifiers were found to care more about the group's image, which led to low post-help-seeking affect in the Outgroup Helpers condition (but not the Ingroup Helpers condition). This suggests highly-identifying participants in the Ingroup Helper and Outgroup Helper conditions experienced help-seeking differently: although high identifiers cared about the group's image regardless of condition, it was only when they sought outgroup help (as all but one did) that affect declined. It is

likely that this occurred because asking for outgroup help is experienced as threatening to the image of the ingroup in the eyes of others. The results from the present study thus provide stronger evidence to suggest that help-seeking is more likely to be experienced as painful (in social-image-related terms) when the helper is outgroup.

Incidentally, it is interesting that whereas post-help-seeking affect correlated negatively with help-seeking in the previous study, no such correlation existed in the present study. Why this difference between studies should exist is unclear: it may relate to the differing nature of the social identities made salient in these two studies (female vs. Dundee University student), or to the fact that while a specific meta-stereotype was made salient in the previous study, only a general sense of outgroup judgement was made salient in the present study. Nonetheless, whatever the reason, the act of help-seeking appears to have had negative consequences for participants' affect in both studies, and the results from both studies suggest that the processes leading to this negative affect differed depending on the group membership of the potential helpers; a conclusion illustrated particularly strongly in the present study.

Ingroup threat. The findings from both the present study and the previous study regarding the possibility of intragroup help-seeking being as costly as intergroup help-seeking are intriguing. Neither study helped clarify the processes that may lead group members to avoid seeking ingroup help, although it should be remembered that the key focus of this thesis is on help-seeking in the context of group-related image concerns (an element most activated and relevant in intergroup contexts). Studies 4 and 5 were thus designed with this issue in mind. Nonetheless, as suggested earlier, it could be the case that seeking ingroup help has the potential to make the group member appear dependent, incompetent and (ultimately) peripheral in

the eyes of other ingroup members. Such concerns may be enhanced in situations where the group member's behaviour might confirm salient-meta-stereotypes, or otherwise damage the ingroup's image in a context of outgroup judgement. Nonetheless, these ideas remain speculative, and warrant more in-depth research beyond the focus of this thesis.

Establishing Suitability of the Intergroup Context

In terms of establishing the suitability of a specific intergroup comparative context for use in Studies 6 and 7, the results of the present study suggest that high ingroup identifiers do experience help-seeking-related threat within a Dundee University vs. University College Edinburgh comparative context. This indicates that the Dundee/Edinburgh comparative context would be suitable for use in Studies 6 and 7, since it should produce a situation in which (highly-identifying) participants would be motivated to challenge a salient negative meta-stereotype. In light of this observation, this comparative context was adopted for Studies 6 and 7.

Future Directions

Having established the suitability of the Dundee University student vs. University College Edinburgh student comparative context, Studies 6 and 7 were intended to deepen the analysis of the key issue of strategy. In particular, these studies involved examining the importance of the specific *contents* of a salient meta-stereotype for group members' *understandings* of what constitutes strategic behaviour in that context. Given the focus in this thesis on how group image concerns may affect participants' help-seeking, the final two studies focus on the context in which social-image concerns were found to be most potent in the present study: when the source of potential help was outgroup. In-keeping with the incremental nature of Studies 5, 6 and 7, Study 6 did not just create a sense of general intergroup judgement, but was

designed to encourage participants to believe that the Dundee University student group was stereotyped in particular ways. More specifically (as mentioned previously), Study 6 was designed to allow exploration of participants' opinions about how they could challenge such stereotypes in an effective manner. Study 7 was designed to investigate whether such opinions would translate into behaviour.

Study 6

After establishing the suitability of the Dundee University vs. University College Edinburgh comparative context in the previous study, the present study was designed to learn more about the key idea of strategy. Specifically, Study 6 was intended to examine participants' perceptions of what constitutes effective strategic behaviour, and how this is affected by the specific contents of the currently-salient meta-stereotype.

The Relevance of Meta-Stereotype Contents

As outlined in the overview of Studies 5, 6 and 7 at the start of this chapter, a potential criticism of the previous studies in this thesis is that, rather than being evidence of strategic behaviour, participants' help-seeking avoidance could simply represent an attempt to avoid social interaction with an outgroup known to perceive the ingroup in negative terms. This would not be evidence of strategic behaviour: instead, it would indicate that group members react unthinkingly and defensively to negative meta-stereotypes, without considering their contents. The present study was intended to address this issue, and to show that group members *do* take heed of the

contents of salient meta-stereotypes when considering how best to challenge such perceptions of the ingroup.

Design and Predictions

The present study involved manipulating the contents of the meta-stereotype presented to participants, so that they were encouraged to believe that the outgroup perceived the ingroup in one of two different ways. Since both stereotypes possessed a negative valence, it was predicted that, regardless of the specific contents of the stereotype, highly-identifying participants would be especially motivated to challenge the outgroup's perceptions of the ingroup. However, the nature of the meta-stereotype contents was predicted to affect *how* participants intended to challenge such perceptions. In other words, while the nature of the meta-stereotype was not predicted to affect participants' motivation to challenge the outgroup's perceptions of the ingroup, it *was* predicted to affect the types of strategic behaviours participants deemed to be effective at challenging such perceptions. Obtaining this result would support the idea that group members consider the contents of salient meta-stereotypes when deciding how best to challenge outgroup perceptions of the ingroup

Contents of the Meta-Stereotypes

As outlined above, the two stereotypes selected for the present study were both negative, but differed in terms of their contents. This was intended to create a situation where participants' perceptions of what constitutes an effective strategic behaviour (and the context-dependence of these perceptions) could be assessed. Specifically, it was predicted that strategic behaviour deemed effective in the context of one of the meta-stereotypes would be deemed ineffective in the context of the other (and vice versa).

In one condition, participants were encouraged to consider the idea that University College Edinburgh students perceive Dundee University students as *unwilling* to seek help. Given that previous studies have shown that participants' help-seeking can be reduced by conceptualising the act in negative terms (e.g., that it highlights one's incompetence and inability, Lee, 2002), the present study (and Study 7) involved re-framing help-seeking in a way that could *encourage* such behaviour: by emphasizing its positive aspects. Specifically, it was implied that help-seeking highlights one's bravery, honesty and awareness of personal limitations (e.g., Karabenick, 1998), and that being reticent about seeking help means one lacks these important traits. This condition was labelled the Help-Seeking condition.

Meanwhile, in the other condition, participants were encouraged to consider the idea that University College Edinburgh students perceive Dundee University students as unwilling to undertake activities for charity. It was felt that while this stereotype was unrelated to help-seeking, it still possessed a negative valence (so participants would be motivated to challenge it). This condition was labelled the Charity condition.

Meta-Stereotype Challenging Behaviours

The key aim of the present study was to examine participants' meta-cognitions concerning how specific meta-stereotypes contents could best be challenged. To this end, participants received two categories of potential stereotype challenging behaviours, and were asked to judge how effective each behaviour would be at challenging the currently-salient meta-stereotype. The first category involved help-seeking-related behaviours, while the second category involved charity-related behaviours. Although altering one's help-seeking might be judged an effective challenging strategy in the context of some salient meta-stereotypes (see earlier

studies), it may be judged ineffective in others. It was therefore predicted that participants would view help-seeking as a more effective way to challenge how their group was seen by the outgroup when the outgroup apparently stereotyped the ingroup as unwilling to seek help (as opposed to being unwilling to engage in charity activities). Since knowledge regarding effective challenging behaviours should be independent of motivations to actually *engage* in these strategies, it was expected these results would be unaffected by participants' identification levels.

Within each category of behaviours, one behaviour could be perceived as being public (i.e. visible to outsiders, including (potentially) University College Edinburgh students), while the other behaviour could be perceived as being private (i.e., only visible to fellow ingroup members). Since previous work (e.g., Hopkins et al., 2007; Klein & Azzi, 2001) has highlighted the importance of meta-stereotype-challenging behaviour being visible to the (stereotyping) outgroup, it was predicted that participants within each condition would perceive the relevant public challenging option as more effective than the relevant private challenging option.

Finally, although care was taken to select a control condition meta-stereotype that was unrelated to help-seeking, participants in both conditions were asked to rate the effectiveness of *avoiding* seeking help. While the perceived effectiveness of such behaviour was predicted to be low in the Help-Seeking condition (since it would represent the very opposite of what should be judged an effective stereotype-challenging behaviour in this context), perceived effectiveness was also predicted to be low in the Charity condition. This latter result, coupled with the predicted finding that *seeking* help would be perceived as an ineffective stereotype-challenging strategy in the Charity condition, would indicate that the charity-related meta-stereotype is

genuinely unrelated to the act of help-seeking, and does not promote strategic help-seeking or strategic help-seeking avoidance.

Conveying the Meta-Stereotypes

As mentioned earlier in this chapter, one of the key advantages of the ‘fabricated outgroup’ design adopted for Studies 5, 6 and 7 is that it is possible to manufacture and manipulate the contents of meta-stereotypes without participants becoming too suspicious as to their authenticity. Since neither of the two meta-stereotypes in question was likely to be linked strongly to the Dundee University student identity (at least not in the same way that dependency was traditionally linked to women in Studies 1, 2 and 4), a new technique for making the meta-stereotypes salient was used. Unlike the trait-rating and phone-call methods, this technique did not rely on participants accessing and rehearsing well-known and long-established stereotypes held about their group. This novel method involved providing participants with the hand-written responses of four ostensible outgroup members, who had apparently been asked to discuss what they thought about Dundee University students. Although the four responses were written in different hand-writing styles and had different contents, they were all constructed by the experimenter. The meta-stereotype theme was contained in all of the responses (although it was more subtle in some and more explicit in others). It was hoped this method would allow for a more convincing and powerful ‘build-up’ of meta-stereotype awareness than would presenting the response of a single outgroup member. By explaining that the four responses were typical of the opinions obtained from University College Edinburgh students, participants were expected to gain the impression that this was how the ingroup was perceived by the outgroup. Moreover, participants were expected to conclude that there was a high level of consensus about this view amongst outgroup members.

Although neither meta-stereotype was ‘well-known’ in the way that the female dependency meta-stereotype was, it was hoped that this method would help convey the two meta-stereotypes in an effective manner.

Method

Participants and Design

Dundee University undergraduates ($N = 43$) were assigned randomly to the two between-groups experimental conditions (Help-Seeking condition $N = 21$ and Charity condition $N = 22$; $M_{\text{age}} = 22.58$ years, $SD = 4.33$, age range = 18-39 years). To reduce complexities surrounding gender-roles and helping, only females were recruited. Participants were approached in the Students’ Union and during practical classes, and were asked if they wished to participate in a brief study. Participants received chocolate in return for their participation.

Procedure and Measures

Participants were presented with a brief pencil-and-paper questionnaire entitled “How are Dundee University Students Perceived by Students from Other Universities?” The experimenter (a fellow female Dundee University student) explained that although various researchers have investigated how universities can attempt to enhance their reputations, few psychologists have considered the ways in which the students who attend the universities are perceived. To this end, the experimenter claimed her aim was to investigate how students from other universities perceive Dundee University students, and, in turn, how Dundee University students respond to these perceptions (see Appendix 7 for experimental materials).

Making the Dundee University Student Identity Salient

Initially, participants received the same ‘background information questions’ from the previous study, asking about their year and subjects of study at Dundee University. In reality, these items aimed to maintain the cover story and to make participants’ Dundee University student identity salient.

To enhance this salience and to obtain a (pre-manipulation) measure of ingroup identification, participants rated their agreement with four items from Hopkins et al. (2007, Study 2). These were adapted to make reference to participants’ Dundee University student identity (e.g., *Being a Dundee University student is very important to me*; 1 = *disagree* and 7 = *agree*). The relevant items were reversed and combined with the others to form an identification scale ($M = 5.41$, $SD = 1.13$, *Cronbach’s* $\alpha = .85$).

Introducing the Meta-Stereotype

Participants were then presented with comments from four ostensible students at University College Edinburgh (see Appendix 7). The four comments concerned University College Edinburgh students’ perceptions of Dundee University students. Each comment was hand-written in a different style, and the hand-writing was matched between conditions, so the style of the first comment in the Help-Seeking condition matched the style of the first comment in the Charity condition. Each comment was presented as one student’s response to one page of a questionnaire entitled “What do University College Edinburgh students think about Dundee University students?” The nature of three of these responses differed by condition, while one remained the same between-condition. The former three comments were matched as closely as possible between-condition (via pilot-testing) for length, tone and phrasing.

In the Help-Seeking condition, the responses reinforced the idea that while Dundee University students are stereotyped as sociable (*I have heard that Dundee students have a great students' union and have a really good time*), they are very reticent about seeking help when struggling with university assignments (*I get the feeling that Dundee students are generally pretty bad at asking for help, which surprises me, as students really should do that*). In the Charity condition, the responses reinforced the idea that while Dundee University students are stereotyped as sociable, they are very reticent about giving time and money to charity (*why are Dundee University students so unwilling to help those in need?*).

Dependent Measures

Responses to the meta-stereotype. After reading the outgroup responses, participants were asked to indicate their feelings towards what they had read and towards the students who voiced the comments. These items were included with the intention of ensuring that the two stereotypes (and the students who espoused them) were perceived in equally negative terms. Participants completed five items, indicating how *fair*, *legitimate*, *insulting*, *annoying* and *hurtful* they found the comments (1 = *not at all* and 7 = *very much*). Participants completed a sixth item (using the same scale), where they rated the extent to which the comments damaged the reputation of Dundee University students. The *fair* and *legitimate* items were reversed and then combined with the other items to form a negativity towards the meta-stereotype scale, ($M = 4.98$, $SD = 1.26$, $Cronbach's \alpha = .88$). Using a single item, participants were then asked to indicate how judgemental they felt that the students who voiced the comments were (1 = *not at all* and 7 = *very much*; $M = 5.79$, $SD = 1.37$).

Challenging the meta-stereotypes. Participants were asked to indicate how motivated they would do be attempt to challenge the outgroup comments (1 = *not at all motivated* and 7 = *very motivated*; $M = 5.23$, $SD = 1.53$), and were presented with a list of specific actions they could perform in an attempt to challenge the outgroup's perceptions of the ingroup. Two of these involved help-seeking: *Asking questions at public presentations held at Dundee University, to make sure that you have understood the speaker properly* and *Emailing lecturers straight away when you do not understand something*. Two involved charity activity: *Donating some money to a national charity set up to help students across the UK who experience difficulties during their studies* and *Donating some money to a local charity set up to help Dundee University students who experience difficulties during their studies*. The first action in each pair involved the presence of an outgroup audience (i.e., the action could potentially be seen by students from other universities, including University College Edinburgh students). The second action involved no outgroup audience. Participants were asked to rate how effective each action would be at challenging the students' comments (1 = *not at all effective* and 7 = *very effective*). Participants were also asked to rate how effective it would be to *avoid* seeking help ($M = 1.26$, $SD = 0.54$) and to *avoid* giving money to charity ($M = 1.81$, $SD = 1.20$).

Similarity. Participants completed three items which measured their perceived similarity to the University College Edinburgh students who apparently voiced the comments (e.g., *How much do you think you would like the people who made the comments, if you met them?*; 1 = *not at all* and 7 = *very much*). These items were combined to form an overall similarity scale ($M = 3.76$, $SD = 1.18$, *Cronbach's* $\alpha = .82$). It was hoped that participants would perceive themselves as equally similar to

the students in the two conditions (thus indicating the equivalence of the different meta-stereotypes and the students who espoused them).

Manipulation check. Finally, to check understanding, participants rated their agreement with three statements (*University College students think that Dundee University students are reluctant to seek help*, *University College students think that Dundee University students are reluctant to help others* and *University College students think that Dundee University students are fun-loving*; 1 = *not at all* and 7 = *very much*). After completing these items, participants were debriefed and compensated.

Results

Manipulation Checks

Participants believed that University College Edinburgh students perceived Dundee University students as significantly more unwilling to seek help in the Help-Seeking condition ($M = 5.86$, $SD = 1.53$) than in the Charity condition ($M = 3.14$, $SD = 1.75$; $t(41) = 5.42$, $p < .001$, $d = 1.65$; see Table 24 for the between-condition means and standard deviations of the major variables).

Furthermore, participants believed that University College Edinburgh students judged Dundee University students as significantly more reluctant to help others in the Charity condition ($M = 5.68$, $SD = 1.62$) than in the Help-Seeking condition ($M = 4.05$, $SD = 1.94$; $t(41) = -3.01$, $p = .004$, $d = 0.91$).

These results suggest that participants in the two conditions attended to the contents of the respective stereotypes, and that the manipulation affected their understandings of how Dundee University students are perceived by University College Edinburgh students.

Negativity Towards the Meta-Stereotypes

Participants perceived the Help-Seeking and Charity stereotypes in equally negative terms (Help-Seeking $M = 5.02$, $SD = 1.37$, Charity $M = 4.93$, $SD = 1.17$; $t(41) = 0.24$, $p = .81$, $d = 0.07$).

Table 24.

Condition means and standard deviations for major variables.

Variables (all 1-7)	Experimental Condition			
	Help-Seeking M	SD	Charity M	SD
Overall comment negativity scale	5.02	1.37	4.93	1.17
How judgemental commentators were	6.05	1.24	5.55	1.47
Motivation to challenge comments	5.43	1.63	4.68	1.36
Overall similarity to commentators	3.70	1.24	3.82	1.14
Effectiveness of donating to a local charity to help Dundee students	3.52*	1.63	4.68*	1.36
Effectiveness of donating to a national charity to help university students	3.19***	1.40	4.77***	1.60
Effectiveness of emailing lecturers when unclear	5.14**	1.62	3.59**	2.06
Effectiveness of asking questions at public presentations	5.48***	1.37	3.59***	1.99
Effectiveness of avoiding seeking help	1.24	0.44	1.27	0.63
Effectiveness of avoiding donating to charity	2.52***	1.37	1.14***	0.35
Uni. College students generally think Dundee students are reluctant to seek help	5.86***	1.53	3.14***	1.75
Uni. College students generally think Dundee students are reluctant to help others	4.05**	1.94	5.68**	1.62
Uni. College students generally think Dundee students are fun-loving	4.52	1.89	4.55	1.34
Level of ingroup identification	5.54	1.10	5.29	1.16

*** = $p \leq .001$, ** = $p < .01$, * = $p < .05$.

Impressions of the Student Commentators

Participants perceived the students who voiced the comments as equally judgemental in the Help-Seeking ($M = 6.05$, $SD = 1.24$) and Charity conditions ($M = 5.55$, $SD = 1.47$; $t(41) = 1.21$, $p = .24$, $d = 0.37$).

Participants in the two conditions also perceived themselves to be equally similar to the commentators (Help-Seeking $M = 3.70$, $SD = 1.24$; Charity $M = 3.82$, $SD = 1.14$; $t(41) = -0.33$, $p = .74$, $d = -0.10$).

Challenging the Meta-Stereotypes

As hoped, participants were equally motivated to challenge the Help-Seeking meta-stereotype ($M = 5.43$, $SD = 1.57$) and the Charity meta-stereotype ($M = 5.05$, $SD = 1.50$; $t(41) = 0.82$, $p = .42$, $d = 0.25$).

Collapsing across conditions revealed that the more participants identified with the ingroup, the more motivated they were to challenge the meta-stereotype (regardless of contents), $r = .52$, $N = 43$, $p < .001$. This correlation was somewhat stronger in the Help-Seeking condition ($r = .61$, $N = 22$, $p = .003$) than in the Charity condition ($r = .43$, $N = 21$, $p = .055$), although the difference between these two correlations was non-significant ($z = 0.76$, $p = .45$).

Effectiveness of Stereotype Challenging Behaviours

Help-seeking-related behaviours. Participants rated *Emailing lecturers straight away when you do not understand something* as a more effective way to challenge the Help-Seeking meta-stereotype ($M = 5.14$, $SD = 1.62$) than the Charity meta-stereotype ($M = 3.59$, $SD = 2.06$; $t(41) = 2.74$, $p = .009$, $d = 0.94$). Participants also rated *Asking questions at public presentations held at Dundee University, to make sure that you have understood the speaker properly* as a more effective way to challenge the Help-Seeking meta-stereotype ($M = 5.48$, $SD = 1.37$) than the Charity meta-stereotype ($M = 3.59$, $SD = 1.99$; $t(41) = 3.60$, $p = .001$, $d = 1.11$).

Charity-related behaviours. Participants rated *Donating some money to a local charity set up to help Dundee University students who experience difficulties during their studies* as a more effective way to challenge the Charity meta-stereotype ($M =$

4.68, $SD = 1.36$) than the Help-Seeking meta-stereotype ($M = 3.52$, $SD = 1.63$; $t(41) = -2.53$, $p = .02$, $d = 0.77$). Participants also rated *Donating some money to a national charity set up to help students across the UK who experience difficulties during their studies* as a more effective way to challenge the Charity meta-stereotype ($M = 4.77$, $SD = 1.60$) than the Help-Seeking meta-stereotype ($M = 3.19$, $SD = 1.40$; $t(41) = -3.44$, $p = .001$, $d = 1.05$).

Public vs. private behaviours. There were no significant within-condition differences in the perceived effectiveness of public vs. private challenging behaviours. Nonetheless, the correlation in the Help-Seeking condition between identification and the perceived effectiveness of the public challenging behaviour (*Asking questions at public presentations held at Dundee University, to make sure that you have understood the speaker properly*; $r = .28$, $N = 21$, $p = .22$) was significantly more positive than the correlation between identification and the perceived effectiveness of the private challenging behaviour (*Emailing lecturers straight away when you do not understand something*; $r = -.21$, $N = 21$, $p = .35$; comparing the two correlations: $t(18) = 2.24$, $p = .04$). This suggests that high identifiers tended to perceive public challenging behaviours as more effective than private challenging behaviours. Indeed, the more participants identified with the ingroup, the *less* effective they perceived private challenging behaviours to be.¹⁰

Avoidance behaviours. When the perceived effectiveness of the avoidance behaviours were investigated (i.e., *avoiding seeking help* and *avoiding giving money to charity*), it was found that *avoiding seeking help* was deemed to be an equally ineffective challenging strategy in both the Help-seeking condition ($M = 1.24$, $SD = 0.44$) and the Charity condition ($M = 1.27$, $SD = 0.63$; $t(41) = -0.21$, $p = .84$, $d = -$

¹⁰ Although analysing the Charity condition also revealed a difference in strength between these two correlations, this difference was non-significant, (Public: $r = .45$, $N = 22$, $p = .04$, Private: $r = .23$, $N = 22$, $p = .30$, $t(18) = 0.79$, $p = .44$).

0.06). Moreover, although *avoiding giving money to charity* was deemed to be significantly less effective as a challenging behaviour in the Charity condition ($M = 1.14$, $SD = 0.35$) than in the Help-Seeking condition ($M = 2.52$, $SD = 1.37$; $t(22.52) = 4.52$, $p < .001$, $d = -1.38$), both means were significantly lower than the scale midpoint of 4, (Help-Seeking, $t(20) = -4.96$, $p < .001$; Charity: $t(21) = -38.24$, $p < .001$). These results suggest that neither of the avoidance behaviours were perceived as effective strategies in either condition.

Discussion

The manipulation checks show participants' understandings of how University College Edinburgh students apparently perceive Dundee University students were affected in the manner predicted. Moreover, the data show participants perceived the meta-stereotypes to be comparable in terms of unfairness, and saw the students voicing the comments as equally judgemental in the two conditions. The data also indicate that participants were motivated to challenge the two meta-stereotypes to an equal degree. These results suggest that the experimental conditions were comparable on important dimensions.

More interestingly (theoretically speaking), the data show a positive correlation between identification and participants' motivation to challenge the outgroup's negative stereotype of their group (regardless of the nature of that stereotype). This result extends the finding from the previous study regarding higher identifiers being more concerned about the ingroup's image. Specifically, the present study indicates that high ingroup identifiers not only care about the group possessing a positive image (Study 5): they are also motivated to act to achieve it (Study 6).

Strategy

With regard to understandings of strategy, participants perceived both of the help-seeking-related behaviours as more effective at challenging the Help-Seeking meta-stereotype than the Charity meta-stereotype. Furthermore, they perceived both of the charity-related behaviours as more effective at challenging the Charity meta-stereotype than the Help-Seeking meta-stereotype. This result highlights two important points.

First, it indicates that group members take heed of the *contents* of salient meta-stereotypes, and reflect upon the efficacy of potential stereotype-challenging behaviours. This conclusion is consistent with Hopkins et al. (2007), who showed that when Scottish participants were made aware that their group is stereotyped as mean by the English, participants only considered certain types of behaviours to be effective at challenging this meta-stereotype. Most notably, Hopkins et al. noted that giving to the outgroup was perceived as more effective than giving to the ingroup, since this former behaviour presumably provided a more powerful and irrefutable display of ingroup benevolence.

Furthermore, the data obtained in the present study also confirm that, as predicted, such efficacy-judgements are not moderated by level of identification. All group members (regardless of identification) can reflect on what types of behaviour may be effective at challenging an outgroup's image of the ingroup. However, it could be expected that only those most invested in the group and its reputation would actually *act* on such knowledge. This prediction is investigated in the next study.

Second, this result suggests that the help-seeking avoidance observed in Studies 3 and 4 was evidence of participants attempting to *challenge* the salient meta-stereotype, rather than simply to avoid interacting with an outgroup known to perceive the ingroup in negative terms. Had the latter been the case, participants in the

Help-Seeking condition in the present study would have been unlikely to advocate outgroup help-seeking as an effective meta-stereotype challenging strategy. This finding thus helps to strengthen the conclusions made in these previous studies.

Private vs. Public Challenging Behaviours

Partial support was obtained for the prediction that ‘public’ challenging behaviours would be perceived as more effective than ‘private’ challenging behaviours. Specifically, in the Help-Seeking condition, the correlation between identification and the perceived effectiveness of the public help-seeking challenging behaviour was significantly more positive than the correlation between identification and the perceived effectiveness of the private help-seeking challenging behaviour. This suggests that high identifiers are particularly aware of the audience’s relevance in their own demonstration of meta-stereotype challenging behaviour. Furthermore, it implies that this awareness affects high identifiers’ opinions concerning the types of strategy likely to be effective in challenging the outgroup’s stereotypes of the ingroup. Perhaps this is because high ingroup identifiers are particularly likely to spend time reflecting on the nature of the ingroup’s image (and how to best manage this image), enabling them to appreciate the role of the audience in such contexts.

Future Directions

The key result from the present study was that all group members (regardless of identification level) have the ability to reflect on the potential efficacy of different behaviours in challenging an outgroup’s image of the ingroup. However, as suggested above, it could be expected that only high identifiers would possess the investment in the group required to actually *act* on such knowledge. To explore this prediction, the final study in this thesis involves the same meta-stereotypes as the present study, but incorporates behavioural measures. Having shown that strong identifiers are

motivated to challenge salient meta-stereotypes (see Studies 5 and 6), and that the perceived implications of strategic help-seeking depend on the contents of the meta-stereotype (see Study 6), Study 7 is intended to show that, when the ingroup is depicted as unwilling to seek help, high identifiers would be willing to actually *seek* outgroup help. That is, Study 7 is designed to show that, in an intergroup context, high identifiers would engage in the strategy that participants in the present study defined as effective.

Study 7

As explained above, the key aim for the final study is to show that, when the help-seeking-related meta-stereotype from the previous study is introduced, high ingroup identifiers are actually willing to *seek* outgroup help. That is, this study is intended to show that help-seeking avoidance is not observed every time a negative meta-stereotype becomes salient. Instead, group members should *tailor* their strategic behaviour, so that it is likely to be effective at challenging the specific contents of the meta-stereotype. This result would provide additional evidence to support the idea that participants who avoid seeking outgroup help (e.g., Studies 3 and 4) are not simply attempting to avoid interaction with that outgroup. Rather, it would show that such avoidance is bound up with the contents of the stereotype, and that just as this may lead to reduced help-seeking, it may also lead to increased help-seeking.

Design and Predictions

The present study had the same design as the previous study (Help-Seeking Meta-Stereotype condition vs. Charity Meta-Stereotype condition), but included a

task in which participants could seek help from University College Edinburgh students (i.e., the outgroup who apparently stereotyped the ingroup). The predictions for the present study are outlined below.

First, on the basis of the observation from Studies 5 and 6 that low identifiers are not strongly motivated to enhance the ingroup's image, it was expected that low identifiers would seek moderate or high levels of help in *both* conditions. The social identity literature would suggest that, in this context, low identifiers should focus on how best to achieve their personal goal of solving the difficult anagrams (i.e., seeking help), rather than on the group-related goal of enhancing and improving the group's image (e.g., Ellemers et al., 1999). These participants should thus concentrate more on the instrumental benefits of help-seeking (rather than its image-related implications), leading to them seeking help regardless of the contents of the currently-salient meta-stereotype.

Second, based on Study 5's results, it was expected that, in the Charity condition, high identifiers would seek *less* help than low identifiers. It will be remembered that Study 5 investigated help-seeking in the context of a non-specified meta-stereotype: a general sense of outgroup judgement. It showed the image concerns evoked by this manipulation were sufficient to make high identifiers particularly reluctant to seek help. In the present study, although the Charity meta-stereotype has specific contents, these are unrelated to help-seeking (and thus cannot be challenged effectively by altering one's help-seeking behaviour).¹¹ Instead, highly-identifying participants were expected to focus on the *image-damaging* aspects of intergroup help-seeking (e.g., demonstrating one's inferiority and incompetence), which are likely to lead to low levels of help-seeking (e.g., Lee, 2002).

¹¹ This assumption was confirmed in the previous study when participants were asked to rate the effectiveness of seeking help and avoiding seeking help in the context of the Charity meta-stereotype.

Finally, the key prediction for the present study was that high ingroup identifiers would seek *more* help in the Help-Seeking than the Charity condition. This is because the previous study (Study 6) revealed that help-seeking is judged an effective way to challenge the Help-Seeking meta-stereotype (but not the Charity meta-stereotype). Obtaining this result would indicate that highly-identifying ingroup members will actually *seek* outgroup help when they feel that doing so would help challenge a negative meta-stereotype.

This result would also help strengthen the key finding obtained in Study 3, where high identifiers were found to seek less help in the Meta-Stereotype Salient condition than in the Intergroup condition (suggesting that a salient meta-stereotype affects ingroup members' help-seeking in a way that a 'purely' intergroup context does not). However, interpretation of Study 3 was complicated by the lack of a significant difference in help-seeking levels between the Intergroup and Interpersonal conditions, meaning that the intergroup nature of the Intergroup condition could not be established conclusively (see Study 3). In the present study, Charity condition participants should have similar experiences to Intergroup condition participants in Study 3 (since the Charity meta-stereotype cannot be challenged effectively via strategic help-seeking, and participants should thus focus more on the strongly intergroup nature of the helping transaction: see above). Meanwhile, Help-Seeking condition participants should have similar experiences to Meta-Stereotype Salient condition participants in Study 3 (since the Help-Seeking meta-stereotype has the potential to be challenged effectively via strategic help-seeking). However, the nature of the key Help-Seeking meta-stereotype in the present study would mean that the key result obtained in Study 3 should *reverse* (i.e., high identifiers should seek *more* help in the presence of the key meta-stereotype, not less). By showing in the present study

that high identifiers behave differently in the Help-Seeking and Charity conditions (or, more specifically, that the Help-Seeking condition elicits help-seeking behaviour intended to challenge the meta-stereotype, whilst the Charity condition does not), the present study would help corroborate the key Intergroup/Meta-Stereotype comparison result from Study 3.

Method

Participants and Design

University of Dundee undergraduates (all native English speakers; $N = 57$) were assigned randomly to the two between-groups experimental conditions (Help-Seeking condition $N = 31$ and Charity condition $N = 26$). To reduce complexities surrounding gender roles and helping, only females were recruited. A two-study cover story was used to communicate the manipulations without participants becoming aware of the study's true purpose. As in previous studies, the 'first' study contained the experimental manipulations, while the 'second' contained the measures.

One dyslexic participant (in the Help-Seeking condition) was removed from the analysis, as was one participant (in the Charity condition) who stated she believed the two studies to be linked and that they were designed to investigate social identity. One participant (in the Charity condition) failed the manipulation check concerning the identity of the potential helpers. Finally, 11 participants (four in the Charity condition and seven in the Help-Seeking condition) noted the link between student identity and help-seeking when asked to describe what they felt to be the aim of the study. These participants were also removed from the analysis. This left 43 participants (Help-Seeking condition $N = 22$ and Charity condition $N = 21$; $M_{\text{age}} = 19.56$ years, $SD = 2.54$, age range = 17-32 years).

Participants were recruited through an online course credit scheme, and were therefore not aware that they were required to be female to complete the study. Participants received either a small monetary payment or partial course credit in return for their participation.

Procedure and Measures

Participants were tested individually in a laboratory. After being brought to the testing room by the experimenter (JW; a fellow female Dundee University student), participants were told they would participate in two short studies. In reality, both studies were connected (see Appendix 8 for experimental materials).

Participants were told the ‘first’ study was JW’s study, while the ‘second’ was being carried out by Final Year students at University College Edinburgh. The experimenter explained she had carried out some research at University College Edinburgh in the past, and that she had recently received an email from a group of Final Year students, who were struggling to recruit enough participants to complete their dissertation research. She also explained she had only ever communicated with the students via email (to ensure participants did not think there was any prior relationship between her and the students).

Manipulations (‘Study 1’)

The ‘first’ study was a paper-and-pencil questionnaire entitled “How are Dundee University Students Perceived by Students from Other Universities?”. JW claimed she had carried out research at University College Edinburgh during the previous month, which had involved asking University College Edinburgh students what they think about Dundee University students. Participants were told they would read some typical student responses from this questionnaire, and then answer a few questions on what they had read. In reality, the study aimed to make participants’

Dundee University student identity salient and to introduce them to one of the two meta-stereotypes (depending on condition).

Making the Dundee University student identity salient. Initially, the participants received ‘background questions’ from Studies 5 and 6, asking about their year and subjects of study at Dundee University. In reality, these items aimed to maintain the cover story and to make participants’ Dundee University student identity salient.

To enhance this salience and to obtain a measure of (pre-manipulation) identification, participants rated their agreement with the six identification items from Study 5. These were combined to form a scale ($M = 5.69$, $SD = 0.89$, *Cronbach’s* $\alpha = .87$).

Introducing the meta-stereotype. Participants were then presented with the comments from the previous study regarding four University College Edinburgh students’ apparent perceptions of Dundee University students. As before, these differed by condition.

Responses to the meta-stereotype. To check they understood what they had read, participants were asked to rate their agreement with the three statements from the previous study (*University College students think that Dundee University students are reluctant to seek help*, *University College students think that Dundee University students are reluctant to give time and money to charity* and *University College students think that Dundee University students are fun-loving*; 1 = *not at all* and 7 = *very much*).

Participants then completed six items indicating how *fair*, *legitimate*, *hurtful*, *insulting* and *damaging to the reputation of Dundee University students* they found the comments (1 = *not at all* and 7 = *very much*). The *fairness* and *legitimacy* items

were reversed and combined with the other items to form a meta-stereotype negativity scale ($M = 4.39$, $SD = 0.93$, *Cronbach's* $\alpha = .67$). Using single items, participants were also asked to indicate how judgemental they believed the students who voiced the comments to be, ($M = 5.72$, $SD = 1.05$) and how motivated they would be to challenge the comments (1 = *not motivated at all* and 7 = *very motivated*; $M = 5.35$, $SD = 1.34$).

Ingroup favouritism and status disparities. To measure ingroup favouritism, participants were presented with the academic performance estimation task from Study 5. This item was coded as ranging from -4 to +4, with 0 as the mid-point, ($M = 0.26$, $SD = 1.66$). To measure intergroup status disparities, participants were presented with the status estimation task from Study 5, which used the same scale, ($M = -0.14$, $SD = 1.63$). This completed the 'first' study.

Measures ('Study 2')

JW then described the 'second' study (i.e., the study apparently being carried out by the Final Year University College Edinburgh students). As in Study 5, she explained that the student researchers were interested in the strategies people use to solve anagrams. In reality, the study aimed to measure help-seeking, as well as some additional variables. The computer-related experimental set-up was exactly the same as in Study 5 (except the potential helpers were always outgroup members).

Demographic items. To maintain the cover story (and to increase identity salience), participants were asked to indicate the name of their university, and to list the subjects they studied. Including these items also made it clear that the University College Edinburgh students knew the participants were Dundee University students.

Puzzle-solving skills. Participants were presented with four items enquiring about their perceived levels of puzzle solving skills (e.g., *In your opinion, how good*

are your puzzle-solving skills?; 1 = *very poor* and 7 = *very good*). These were combined to form a puzzle-solving skills scale ($M = 3.14$, $SD = 1.01$, *Cronbach's* $\alpha = .66$).

The anagrams. Participants were instructed to attempt to solve the 10 anagrams from Study 5 in 90 seconds.

Dependent variable: help-seeking. As in previous studies, participants could then request as much or as little help as they wished on each anagram from the student researchers, selecting from one of four levels (*none*, *a small hint*, *a large hint* and *a full answer*). The University College Edinburgh Final Year students would apparently be able to see these requests, and send back any help that was required, via computer. Participants were told they would have more time to complete the anagrams at a later point in the study.

Defining 'help-seeking'. Since help-seeking in previous anagram studies (Studies 2, 4 and 5) was defined as the percentage of *large hints* combined with the percentage of *full answers*, this definition was also adopted in the present study. Using this definition meant 88.40% of participants sought help (regardless of the extent of that help).¹²

Two participants each solved one of their anagrams incorrectly: *honey* as *enjoy* and *carnation* as *corination* (*sic*), and then proceeded to seek no help on either of these items. Using the same criteria as previous studies, it was assumed that these

¹² Although the predominant reason for adopting the '*large hints* plus *full answers*' definition of help-seeking in the present study was to ensure consistency with previous studies, it should be noted that the levels of help-seeking observed in the present study did create a similar pattern to those observed in previous studies. As in these studies, the percentage of *full answers* sought on unanswerable anagrams was very low (8.67%). Moreover, very few responses on unanswerable anagrams were for *no help* (1.40%). Thus, as in previous studies, defining 'help-seeking' as *full answers* or as *small hints* plus *large hints* plus *full answers* risked floor and ceiling effects respectively. Instead, combining *large hints* (59.02%) and *full answers* (8.67%) produced a more acceptable value (67.69%). These results help to vindicate the decision to define 'help-seeking' as *large hints* plus *full answers* in the present study.

participants believed they had solved these incorrect anagrams correctly. These anagrams were therefore not included in the analysis of help-seeking behaviour.

Measuring additional variables. After being asked to note down any strategies they used to solve the anagrams (in order to maintain the cover-story), participants completed a number of additional items, which were identical in both conditions. Mood was measured on two 7-point bipolar scales (*bad/good* and *negative/positive*), which were combined to form a positive affect scale ($M = 3.45$, $SD = 1.04$; $r = .81$ $N = 43$, $p < .001$).

Four items from Study 5 enquired about participants' perceived similarity to the student researchers, and these were combined to form a similarity scale ($M = 4.72$, $SD = 1.04$, *Cronbach's* $\alpha = .87$). Participants also rated how similar they were to JW (1 = *not at all similar* and 7 = *very similar*; $M = 4.70$, $SD = 1.01$).

Participants' perceptions of the experimental situation were measured with the four items from Study 5 (e.g., *When you asked us for assistance, to what extent did you feel that you were a representative of the group 'Dundee University students' interacting with representatives of the group 'University College students'?*), and these were combined to form an overall group context scale ($M = 2.91$, $SD = 0.88$, *Cronbach's* $\alpha = .56$). This scale was conceptualised as a measure of situational identity salience.

Participants also rated the extent to which seeking help *damaged* the image of Dundee University students (1 = *not at all* and 7 = *very much*; $M = 2.21$, $SD = 1.54$), and the extent to which seeking help *improved* the image of Dundee University students (1 = *not at all* and 7 = *very much*; $M = 3.16$, $SD = 1.62$).

Post-manipulation identification was measured by presenting the identification items from the 'first' study for a second time. These six items were combined to form

a scale ($M = 5.42$, $SD = 1.12$, *Cronbach's* $\alpha = .92$). The pre- and post-manipulation measures of identification correlated ($r = .93$, $N = 43$, $p < .001$), so were combined to form an overall scale ($M = 5.56$, $SD = 0.98$, *Cronbach's* $\alpha = .95$). Unless otherwise stated, any analyses involving identification will refer to this combined scale.

Social self-esteem was measured using the relevant sub-scale of the State Self-Esteem Scale (Heatherton & Polivy, 1991, see Study 5). The items were combined to form a scale, where high values indicated higher social esteem ($M = 5.19$, $SD = 1.05$, *Cronbach's* $\alpha = .85$).

Finally, participants were asked if they could remember the institutional affiliation of the ostensible researchers (to ensure they had taken note of the researchers' outgroup status), and to note down what they believed to be the aim of the study. Participants were then debriefed and compensated.

Results

Manipulation Checks

Participants believed University College Edinburgh students perceived Dundee University students as more reluctant to seek help in the Help-Seeking condition ($M = 5.95$, $SD = 1.50$) than in the Charity condition ($M = 3.33$, $SD = 1.56$; $t(41) = -5.60$, $p < .001$, $d = 1.71$; see Table 25 for between-condition means and standard deviations for the major variables).

Furthermore, participants believed University College Edinburgh students perceived Dundee University students as significantly more unwilling to give time and money to charity in the Charity condition ($M = 5.90$, $SD = 1.41$) than in the Help-Seeking condition ($M = 2.36$, $SD = 1.29$; $t(41) = 8.59$, $p < .001$, $d = 2.62$). These results show participants attended to the contents of the respective stereotypes, and

the manipulation affected their understandings of how the ingroup is judged by the outgroup.

Main Analyses

Participants' level of affect and social-state self-esteem did not differ significantly between-condition. Neither did their perceptions of intergroup status, intergroup academic performance, or the extent to which help-seeking would damage/improve the ingroup's image (see Table 25).

Impressions of the Meta-Stereotypes

Corroborating the findings of the previous study, the two meta-stereotypes were perceived as equally negative (Help-Seeking $M = 4.30$, $SD = 1.17$; Charity $M = 4.48$, $SD = 0.60$; $t(31.53) = 0.62$, $p = .54$, $d = -0.19$), and participants were equally motivated to challenge them in the Help-Seeking ($M = 5.32$, $SD = 1.32$) and Charity conditions ($M = 5.38$, $SD = 1.40$; $t(41) = 0.15$, $p = .88$, $d = -0.04$).

Impressions of the Student Commentators

Participants perceived themselves as being equally similar to the students who voiced the comments in the Help-Seeking ($M = 4.94$, $SD = 1.03$) and Charity conditions ($M = 4.48$, $SD = 1.01$; $t(41) = -1.50$, $p = .14$, $d = 0.45$), and also perceived the students who voiced the comments as equally judgemental in the Help-Seeking ($M = 5.68$, $SD = 1.13$) and Charity conditions ($M = 5.76$, $SD = 1.00$; $t(41) = 0.25$, $p = .81$, $d = -0.07$). Furthermore, participants perceived themselves as being equally similar to JW in the Help-Seeking ($M = 4.91$, $SD = 1.02$) and Charity conditions ($M = 4.48$, $SD = 0.98$; $t(41) = -1.42$, $p = .16$, $d = 0.43$).

Perceptions of the Context

As hoped, participants perceived the experimental context in equally group-related terms in the Help-Seeking ($M = 2.84$, $SD = 0.76$) and Charity conditions ($M = 2.98$, $SD = 1.00$; $t(41) = 0.50$, $p = .62$, $d = -0.16$).

Table 25.

Condition means and standard deviations for the major variables.

Variables (all 1-7, unless stated)	Experimental Condition			
	Help-Seeking		Charity	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Help-seeking (% large + % full)	73.18	31.89	61.93	34.28
Overall meta-stereotype negativity	4.30	1.17	4.48	0.60
How judgemental commentators were	5.68	1.13	5.76	1.00
Motivation to challenge comments	5.32	1.32	5.38	1.40
Overall group context scale	2.84	0.76	2.98	1.00
Extent to which help-seeking damages the ingroup's image	2.09	1.57	2.33	1.53
Extent to which help-seeking improves the ingroup's image	3.36	1.87	2.95	1.32
Pre-manipulation identification	5.80	0.96	5.59	0.82
Post-manipulation identification	5.49	1.19	5.35	1.06
Combined pre/post identification	5.64	1.06	5.48	0.92
Positive affect	3.57	1.12	3.33	0.97
Similarity to researchers	4.94	1.03	4.47	1.01
Similarity to JW	4.48	0.98	4.91	1.02
Perceived puzzle-solving skills	2.74**	0.88	3.56**	0.99
Social state self-esteem	5.29	1.08	5.10	1.03
Academic performance of Dundee students compared to Edinburgh students ^a	-0.05	1.46	0.57	1.83
Status of Dundee students compared to Uni. College Edinburgh students ^a	-0.14	1.42	-0.14	1.85
Edinburgh students think Dundee students are reluctant to seek help	5.95***	1.50	3.33***	1.56
Edinburgh students think Dundee students are reluctant to give to charity	2.36***	1.29	5.90***	1.41
Uni. College Edinburgh students think that Dundee Uni. students are fun-loving	5.50*	1.06	4.38*	1.91

a = -4 to +4 scale, *** = $p < .001$, ** = $p \leq .01$, * = $p < .05$.

Percentage of Anagrams Unanswered

The percentage of anagrams left unanswered did not differ by condition, (Help-Seeking $M = 72.27$, $SD = 7.52$, Charity $M = 73.81$, $SD = 7.40$, $t(41) = 0.68$, $p = .50$, $d = -0.21$), indicating that any between-condition differences in help-seeking were due to the experimental manipulations, rather than participants in one condition finding the task more difficult.

Extent of Help-Seeking

Participants in the Help-Seeking condition sought non-significantly more help ($M = 73.18$, $SD = 31.89$) than participants in the Charity condition ($M = 61.93$, $SD = 34.28$, $t(41) = -1.11$, $p = .27$, $d = -0.34$). However, it was predicted that this effect would be moderated by identification.

Level of Identification

Since overall level of identification did not differ between-condition, it was treated as an individual differences variable, (Help-Seeking $M = 5.64$, $SD = 1.06$ and Charity $M = 5.47$, $SD = 0.92$; $t(41) = -0.58$, $p = .57$, $d = 0.17$). Regression analysis was used in order to investigate whether identification might moderate the effect of condition on help-seeking.¹³

Analysis of Moderation

The data were found to meet the assumptions of regression analysis. After taking account of the variance explained by the standardized condition and the standardized identification variables individually, the interaction between standardized condition and the standardized identification variable was found to predict help-seeking, $R^2 = 0.35$, $\Delta R^2 = 0.31$, $F(1, 39) = 18.68$, $p < .001$, indicating moderation.

¹³ For interest, the measure of situational identity salience was not found to moderate the effect of condition on help-seeking.

Simple slopes. This interaction was investigated with the simple slopes macro devised by Preacher et al. (2006). The interaction was plotted at one standard deviation above ('high') and one standard deviation below ('low') the mean of the moderator (see Figure 16). In-keeping with the study's main prediction, this revealed that, for high identifiers, help-seeking was significantly higher in the Help-Seeking condition than in the Charity condition, (*simple slope* = 25.34, *SE* = 6.19, *t* = 4.10, *p* = .0002). However, the expectation that low identifiers would seek moderate or high levels of help in both conditions was not fully supported: although low identifiers' help-seeking was high in both conditions (see Figure 16), they sought more help in the Charity condition than in the Help-Seeking condition (*simple slope* = -12.63, *SE* = 6.09, *t* = -2.07, *p* = .045).

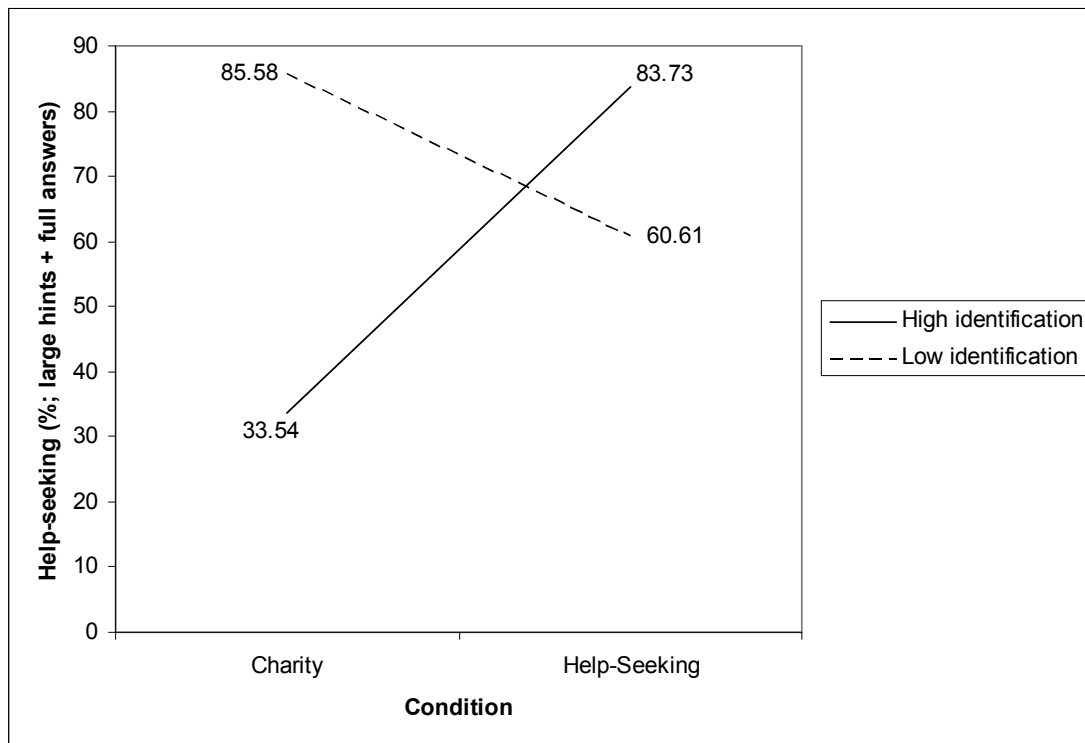


Figure 16. The moderating effect of identification (combined measure) on the relationship between experimental condition and help-seeking.

To compare highly- and lowly-identifying participants *within* each condition, this interaction was re-plotted (with identification as the Independent Variable and condition as the moderator variable; see Appendix 1 for statistical details). As expected, this analysis revealed that, in the Charity condition, high identifiers sought significantly *less* help than low identifiers, (*simple slope* = -26, *SE* = 6.64, *t* = -3.92, *p* = .0003; see Figure 16). Examining the Help-Seeking condition revealed that high identifiers sought significantly *more* help than low identifiers, (*simple slope* = 11.56, *SE* = 5.61, *t* = -2.06, *p* = .046).¹⁴

¹⁴ For completeness, the moderation analysis was repeated with the pre-manipulation measure of identification only (to ensure the effects obtained reflected chronic individual differences in participants' identification, rather than being the product of the experimental manipulations). The interaction was significant, $R^2 = 0.29$, $\Delta R^2 = 0.25$, $F(1, 39) = 13.87$, $p = .001$, and, as before, high identifiers sought significantly more help in the Help-Seeking condition than in the Charity condition (*simple slope* = 23.75, *SE* = 6.55, *t* = 3.63, $p = .001$). However, low identifiers sought *non-significantly* less help in the Help-Seeking condition than in the Charity condition (*simple slope* = -10.79, *SE* = 6.38, *t* = -1.69, $p = .099$). High identifiers sought significantly less help than low identifiers in the Charity condition (*simple slope* = -23.38, *SE* = 7.06, *t* = -3.31, $p = .002$), while high identifiers sought marginally more help than low identifiers in the Help-Seeking condition (*simple slope* = 10.76, *SE* = 5.85, *t* = 1.84, $p = .07$). This is a similar pattern of results to that obtained from the pre/post measure of identification.

Additionally, an outlier analysis revealed one case had a standardized residual more than two standard deviations from the regression line, while nine other cases had leverage values that exceeded the recommended criterion of twice the average leverage value for the sample (Hoaglin & Welsch, 1978). When these cases were removed, the interaction term remained significant, $R^2 = 0.38$, $\Delta R^2 = 0.29$, $F(1, 29) = 13.37$, $p = .001$, so no cases were found to be having an unduly large influence on the result reported above.

Before carrying out any of these analyses, the skew and kurtosis values of the key help-seeking measure were analysed by dividing the two values by their respective standard errors. The resultant values were then compared to Field's (2005) critical values. Although the kurtosis value was acceptable ($z = -0.36$, $p > .05$), the data were found to be negatively skewed ($z = -2.75$, $p < .01$). For completeness, the data were transformed and re-analysed. Although the three main methods of transformation were attempted (log-10, square-rooting and reciprocal transformation), (Field, 2005), square-rooting was the only transformation that did not worsen the distribution, so the square-rooting method of transformation was used. When the transformed skew and kurtosis values were divided by their respective standard errors, both resultant values were non-significant ($z_{\text{skew}} = -0.14$, $z_{\text{kurtosis}} = -1.40$, $p > .05$), indicating that the square-root transformation improved the distribution of the help-seeking data. As was the case with the non-transformed data, help-seeking was non-significantly higher in the Help-Seeking condition ($M = 6.02$, $SD = 3.39$) than in the Charity condition ($M = 4.67$, $SD = 3.18$, $t(41) = 1.35$, $p = .19$, $d = 0.41$). The moderation analyses involving level of ingroup identification was also significant with the transformed data, $R^2 = 0.28$, $\Delta R^2 = 0.22$, $F(1, 39) = 11.96$, $p = .001$. When this interaction was investigated using simple slopes analyses, the high ingroup identifiers sought significantly more help in the Help-Seeking condition than in the Charity condition (as before), (*simple slope* = 2.36, *SE* = 0.66, *t* = 3.59, $p = .0009$). However, it was found that low ingroup identifiers sought *non-significantly* less help in the Help-Seeking condition than in the Charity condition (*simple slope* = -0.87, *SE* = 0.65, *t* = -1.35, $p = .19$). This latter result was found to be significant with the untransformed data. When the analysis was repeated with experimental condition as the moderator and level of identification as the Independent Variable, it was revealed that, as with the untransformed data, high identifiers in the Charity condition sought significantly less help than low identifiers (*simple slope* = -

Discussion

Supporting the key prediction, the data show high identifiers sought higher levels of outgroup help when the salient meta-stereotype's contents could be challenged effectively by seeking help. This result integrates two findings from the previous study. That is, high ingroup identifiers are particularly motivated to challenge meta-stereotypes, and group members judge seeking outgroup help to be effective at challenging the help-seeking-related meta-stereotype. While the previous study showed group members understand how best to challenge meta-stereotypes, the present study shows those who identify highly with the ingroup *act* on this knowledge (because they are particularly concerned about the ingroup's image).

These results support the claim that the help-seeking avoidance observed in previous studies was not due simply to participants distancing themselves from an outgroup known to perceive the ingroup in negative terms. Rather, high identifiers in the Help-Seeking condition in the present study *chose* to interact with the outgroup by seeking help. In turn, this implies that participants in the previous studies considered help-seeking avoidance to be an effective strategy for challenging the meta-stereotype in that particular context (i.e., the context presented in the study in question).

Taken together, these results suggest that group members consider the specific *contents* of negative meta-stereotypes, and (if they identify highly with the group) they then tailor their stereotype-challenging behaviour according to what they perceive to be a relevant response. This response may involve avoiding seeking help

2.22 $SE = 0.70$, $t = -3.16$, $p = .003$). However, high identifiers in the Help-Seeking condition sought *non-significantly* more help than low identifiers (*simple slope* = 0.97 $SE = 0.59$, $t = 1.63$, $p = .11$). This comparison was significant with the untransformed data. Overall, these analyses indicate that the results obtained using the transformed data were largely similar to the results obtained using the untransformed data, although the results of the moderation analysis did differ somewhat between the transformed and untransformed analyses. Due to the transformation not changing the overall pattern of the data (and due to the concerns raised in earlier studies about transforming data), the non-transformed data were used.

(e.g., Studies 2, 3 and 4), but (as in the case of the present study) it may also involve *seeking* help.

In broader terms, this conclusion provides corroborative evidence in relation to Hopkins et al.'s (2007) work. These authors found that, in the context of a salient negative meta-stereotype, ingroup members only engage in help-giving which is likely to challenge the outgroup's perceptions of the ingroup in an effective manner. For instance, in Hopkins et al.'s work, participants gave more to outgroup members (but not to ingroup members) in order to demonstrate ingroup generosity in the context of a meanness-related stereotype. Discussing this result, the authors argued that outgroup giving is more likely to be interpreted as a genuine example of generosity (as opposed to ingroup giving, which could be interpreted as a simple display of ingroup favouritism). This makes outgroup giving a more effective meta-stereotype challenging tool in this context. Strengthening and extending this finding, the results from the present study suggest that ingroup members only engage in *help-seeking* which is likely to challenge the outgroup's perceptions of the ingroup in an effective manner. Moreover, the extent of this efficacy is likely to depend on the particular context within which the intergroup interaction occurs.

More generally, the finding that high ingroup identifiers sought more help in the Help-Seeking condition than in the Charity condition also helps corroborate the key result from Study 3 (i.e., that high ingroup identifiers sought less help in the Meta-Stereotype Salient condition than in the Intergroup condition). Although interpretation of this important result was complicated by the lack of a significant difference in help-seeking levels between the Intergroup and Interpersonal conditions (making it unclear whether the Intergroup condition really did feature a strong intergroup context), the results of the present study provide further evidence to

strengthen the interpretation of Study 3. Although the pattern is reversed in the present study (i.e., high identifiers sought *more* help in the key experimental condition, not less), the key idea in both studies is that the experimental condition (Meta-Stereotype Salient in Study 3 and Help-Seeking in the present study) elicits help-seeking behaviour intended to challenge the meta-stereotype, whilst the control condition (Intergroup in Study 3 and Charity in the present study) does not. This conclusion provides strong support for the strategic help-seeking hypothesis, by showing that a salient (and potentially challengeable) meta-stereotype promotes strategic help-seeking behaviour in a way than an intergroup context (Study 3) or an intergroup context with an un-challengeable meta-stereotype (the present study) does not. Moreover, this strategic behaviour may involve seeking or avoiding seeking help, depending on the context.

Other Predictions

The data supported another prediction: that high identifiers would seek less help than low identifiers in the Charity condition. As mentioned above, although a specific meta-stereotype was made salient in this condition, the previous study's results revealed this meta-stereotype to be unconnected to acts of help-seeking (i.e., participants did not feel that the Charity meta-stereotype could be challenged effectively by either seeking or avoiding seeking help). This implied a sense of judgement that cannot be addressed by altering one's help-seeking behaviour, and in this context it was predicted that the relationship between identification and help-seeking would mirror that in Study 5. This is exactly what was found (i.e., a negative correlation between identification and help-seeking).

Indeed, this negative correlation in the Charity condition contrasts strongly with the *positive* correlation between these two variables in the Help-Seeking

condition: a relationship that was not predicted. It is not entirely clear why low identifiers sought less help than high identifiers in the Help-Seeking condition: it could be that low identifiers cared so little about the group that they were not concerned about its image. Instead, they may have actively tried to *confirm* the stereotype by avoiding seeking help (although exactly why they would engage in this type of sabotage is unclear). However, it should be noted that repeating the regression analysis with the transformed data (see footnote 14) reveals a non-significant difference between high and low identifiers' help-seeking levels in the Help-Seeking condition, which is consistent with predictions. This suggests it may be unwise to focus too strongly on this unpredicted result in the Help-Seeking condition.

The expectation that low identifiers would seek moderate or high levels of help in both conditions was not entirely supported: although low identifiers' help-seeking was high in both conditions, they sought more help in the Charity condition than in the Help-Seeking condition. Again, it is not clear why this should be the case, although it may relate to the potential sabotaging issue discussed above, which could have led to a decline in levels of help-seeking by low identifiers in the Help-Seeking condition. However, this result also became non-significant when the transformed help-seeking data were used, creating a pattern consistent with predictions. Again, this suggests it may be unwise to focus too strongly on this unpredicted result.

Conclusions

These issues regarding unpredicted results should not detract from the key message of the present study: high ingroup identifiers can be encouraged to seek help when doing so has the potential to challenge a negative meta-stereotype. This behaviour can be perceived as being at odds with what might be considered 'natural' behaviour for group members who are highly committed to protecting the ingroup's

image, since these participants sought help from members of a judgemental outgroup: an act that risks highlighting the ingroup's dependency and inadequacy (e.g., Lee, 2002). However, by adopting a strategic help-seeking perspective, the participants' behaviour takes on new meaning: in this context, the act of seeking help can be perceived as an attempt to challenge a specific stereotype held about the ingroup.

Although all participants were likely to weigh the disadvantages and advantages of help-seeking before deciding how best to respond (e.g., Dovidio, Piliavin, Gaertner, Schroeder, & Clark, 1991), this process appears to have led to different conclusions in the two conditions. Highly-identifying participants in the Charity condition appear to have concluded that the image-related disadvantages of the group being perceived as dependent outweighed the instrumental benefits of obtaining assistance. Meanwhile, highly-identifying participants in the Help-Seeking condition appear to have concluded that the image-related advantages of challenging a negative meta-stereotype (as well as the instrumental advantages of obtaining assistance) outweighed the dependency-related disadvantages.

These results show it is important to consider ingroup members' understandings of the nature of the currently-salient meta-stereotype, and the meanings they attach to help-seeking within that particular context. While intergroup help-seeking appears to have been equated with image threat in the Charity condition, it appears to have represented a tool for social-image change in the Help-Seeking condition. This implies that it is not sufficient to make all-encompassing assumptions regarding how ingroups do and do not engage with outgroups during helping transactions. Instead, it is vital to consider the nature of the current context, and how this shapes the *meanings* group members attribute to help-seeking behaviour.

Studies 5, 6 and 7: Summary and Conclusions

The three studies presented in this chapter were intended to provide an incrementally-progressing analysis of the key concept of strategy. To achieve this, Study 5 established the suitability of the Dundee University student vs. University College Edinburgh student comparative context. Furthermore, Study 5 showed that strong identifiers were particularly unwilling to seek help in the context of general outgroup judgement, thereby reiterating the important effect of participants' level of identification.

Adopting this Dundee/Edinburgh comparative context, Study 6 involved introducing participants to one of two specific (negative) meta-stereotypes. As predicted, participants perceived help-seeking related behaviours to be more effective at challenging the Help-Seeking meta-stereotype than the Charity meta-stereotype, while they perceived charity-related behaviours to be more effective at challenging the Charity Meta-Stereotype than the Help-Seeking Meta-Stereotype. Incidentally, these findings were unrelated to participants' ingroup identification, since all group members (regardless of identification) are likely to possess knowledge regarding effective stereotype-challenging behaviours.

These results suggest that group members take heed of the *contents* of salient meta-stereotypes, and use these observations to make decisions regarding the potential efficacy of different challenging behaviours. This shows that group members do not simply react in a defensive and avoidant manner to every meta-stereotype they encounter, thereby suggesting that the help-seeking avoidance observed in previous studies was evidence of genuine strategic behaviour.

Finally, Study 7 involved investigating whether these perceptions of efficacy translated into actual behaviour for those who identified highly with the ingroup. As predicted, high identifiers sought more help in the Help-Seeking Meta-Stereotype condition than in the Charity Meta-Stereotype condition, indicating that highly-identifying group members in the former condition were willing to seek outgroup help in an attempt to challenge the contents of the salient meta-stereotype.

Taken as a whole, these three studies corroborate and extend the results from the first four studies in this thesis. The key message from the studies in this chapter (that group members take heed of the specific contents of meta-stereotypes and tailor their stereotype-challenging behaviour accordingly) strengthens the claim made in previous studies regarding participants' help-seeking avoidance being evidence of strategic behaviour. Beyond this, the studies in this chapter have shown that salient negative meta-stereotypes can also encourage interaction with (and help-seeking from) the stereotyping outgroup. This result provides strong support for the strategic help-seeking hypothesis, since it suggests that help-seeking can be a tool for social image change that group members can (and do) use in ways they deem appropriate for achieving this goal. To appreciate this idea, one must consider the meanings attached to help-seeking in the current context, and how those meanings might shape group members' strategic behaviour. In conclusion, the studies in the present chapter suggest that strategic help-seeking behaviour (like all strategic behaviour) can only be understood fully in the context within which it occurs. This key issue of context-dependent meaning is addressed in more depth in the General Discussion.

Chapter 12: General Discussion

The key aim of this thesis was to investigate the strategic help-seeking hypothesis: the proposition that group members use help-seeking as a tool for managing and enhancing the ingroup's image in the eyes of outgroups. In most of the studies, this idea was investigated in the context of a specific phenomenon with the potential to threaten the group's image: a salient negative meta-stereotype. The prediction was therefore made that group members would utilize strategic help-seeking to attempt to challenge these negative perceptions of the ingroup: something expected to occur independently of levels of material need.

This hypothesis was reached after undertaking a review and analysis of the helping-transaction literature, beginning with the rich research agenda forwarded by anthropologists and sociologists, before moving on to consider how social psychologists have contributed to our understandings of this domain. The key conclusion from this theoretical analysis was that the contribution made by social psychological research from the 1960s onwards has been somewhat limited, due to its failure to address two key issues: i) the important role played by social groups and social group memberships in helping transactions, and ii) the concept that engagement in helping transactions can be motivated by desires to achieve underlying goals that have little to do with meeting another's needs, and instead relate to personal improvement or gain. While the theoretical review and analysis also noted that more recent social psychological work has begun to address these topics, both issues remain understudied (particularly in the context of help-seeking).

The aim of this thesis was to address these neglected areas in the literature, with the intention of providing a novel contribution by extending social psychological

understandings of help-seeking behaviour. By adopting a social identity perspective (e.g., Turner et al., 1987) and by envisaging help-seeking as potentially *strategic* (defined as behaviour engaged in by group members with the intention of enhancing or protecting the image of the ingroup in the eyes of outgroups), this thesis conceptualised help-seeking (and thus help-seekers and helpers) in a rather different manner to much of the previous social psychological research. By highlighting the idea that help-seeking group members can obtain more from the helping transaction than simply having their needs met, the complexity and subtlety of such interactions could be more fully appreciated.

Across the seven studies described and discussed in this thesis, strong evidence was obtained in support of the strategic help-seeking hypothesis. Study 1 provided initial exploration of the concept (in the absence of explicit meta-stereotype salience), and suggested that the threat associated with help-seeking depends on how participants categorize themselves (and thus the help-giver). While evidence was obtained to suggest that focussing on the group-related commonalities one shares with the potential helper may increase participants' willingness to seek help in an intergroup context, the results suggested that there is also the potential for the act of seeking *ingroup* help to be perceived as threatening. Thus, regardless of its exploratory nature, Study 1 helped to highlight the complexity (and potential counter-intuitiveness) of group-related help-seeking.

Study 2 provided the first explicit manipulation of meta-stereotype salience in the thesis (in the context of gender identity). Moreover, it was the first of five studies to include behavioural measures of help-seeking, enabling the thesis to be completed in the spirit of the elaborate helping transaction studies of the 1960s and beyond (e.g., Latané & Darley, 1970; Levine et al., 2005; Shotland & Heinold, 1985). The

conditional indirect effects results of Study 2 revealed that presenting participants with a salient dependency-related meta-stereotype led to higher levels of perceived meta-stereotype trait unfairness than a purely interpersonal context, and that these perceptions of unfairness led to reduced help-seeking from the outgroup.

While it was not possible to untangle the effects of the meta-stereotype from the effects of the intergroup context in Study 2, Study 3 strengthened these findings by shifting to a non-binary identity (nationality: Scottish vs. English). This helped remedy the potential problem of sub-group membership (a phenomenon which had the potential to dilute the effect of the meta-stereotype manipulation). Study 3 showed that, for participants who acted strongly as Scots during the study, a salient handout dependency-related meta-stereotype led to significantly lower levels of outgroup help-seeking than either an interpersonal context or an intergroup context that lacked a salient meta-stereotype. This key result provides strong support for the strategic help-seeking hypothesis by suggesting that salient meta-stereotypes have effects on help-seeking beyond those produced by a simple intergroup context.

With the intention of extending this important result, Study 4 was designed to enable investigation of participants' help-seeking in the context of a naturalistic meta-stereotype manipulation (the fabricated telephone-call method). Using this method to make a dependency-related meta-stereotype salient (in the context of gender identity) led to a significant reduction in participants' help-seeking, regardless of whether the source of that help was ingroup or outgroup. Investigating the relevance of the potential helper's group membership in more depth than Study 1, Study 4 enabled conclusions to be drawn regarding the experiential differences of seeking ingroup and outgroup help in the context of a salient negative meta-stereotype. The results suggested that seeking outgroup help may lead to more group-related image threat

than seeking ingroup help (a conclusion reached by considering the extent to which participants perceived the meta-stereotype as unfair), and that this has negative implications for participants' post-help-seeking affect.

This idea was investigated in more depth in Study 5, in the context of a novel identity (Dundee University students). Study 5 indicated that strong ingroup identifiers are particularly likely to care about the ingroup's image, but that these feelings of care and concern only translate into low post-help-seeking affect in the context of general outgroup judgement when participants are faced with an outgroup helper (a context which has the potential to damage the ingroup's image), rather than an ingroup helper (a context which only has the potential to damage the participants' personal image as a group member). This suggests that seeking ingroup and outgroup help in the context of outgroup judgement can *both* be perceived as costly, but that only outgroup help-seeking leads to lower affect via the activation of group-related image-threat issues.

Moreover, Studies 5, 6 and 7 provided an incrementally-progressing analysis of the key concept of strategy. Study 5 enabled a suitable intergroup comparative context to be identified for use in Studies 6 and 7 (Dundee University students vs. University College Edinburgh students). Specifically, this context produced a negative correlation between identification level and help-seeking in Study 5, indicating that strong identifiers were particularly unwilling to seek help from either ingroup or outgroup members in a context of general outgroup judgement. This result highlighted the important role played by identification level in affecting participants' help-seeking (something not obtained in Study 4).

Utilizing the Dundee/Edinburgh intergroup context, Studies 6 and 7 were intended to address the concern that participants in previous studies may have avoided

seeking help with the simple aim of preventing social interaction with an outgroup known to perceive the ingroup in negative terms (which would not be evidence of strategic behaviour, and would instead suggest that group members may react unthinkingly and defensively to any negative meta-stereotype they encounter). Studies 6 and 7 thus involved investigating the relevance of the *contents* of salient meta-stereotypes for participants' cognitions and behaviour. Specifically, Study 6 showed that the perceived strategic effectiveness of *seeking* outgroup help could be increased by suggesting to participants that the outgroup perceived the ingroup as unwilling to seek help (an effect that occurred independently of identification level, since all group members are likely to possess understandings of what constitutes effective strategic behaviour). Study 7 showed that these perceptions of efficacy translated into actual help-seeking behaviour, but only for high identifiers (who, based on the results of previous studies, were likely to be particularly motivated to protect and enhance the ingroup's image). Taken together, these studies thus suggest that group members take heed of the *contents* of salient meta-stereotypes (rather than simply the threat and negativity associated with them), and tailor their strategic behaviour depending on these contents.

Conclusions and Implications

The Relevance of Context

This latter point is perhaps the most important conclusion to draw from the studies in this thesis, because it suggests that the group-related *meanings* attached to seeking help depend on the nature of the current context. This observation concerning the significance of context is consistent with Gergen and Gergen's (1983) social constructionist interpretation of the helping transaction outlined in Chapter 1. Like this approach (and much of the anthropological and sociological research outlined in

Chapter 1), the work in this thesis suggests that the act of help-seeking must be considered within a larger framework of meanings. In this thesis, help-seeking was conceptualised in a specific way: as a tool for group-related social image management. An appreciation of this enables the importance of context to be revealed: while refusing help could be seen as indicating a simple lack of need in some contexts, in others it can be conceptualised as a strategic attempt to protect the ingroup's image. This idea is particularly pronounced in the final studies of the thesis, since the finding that (strongly-identifying) ingroup members were particularly *willing* to seek outgroup help in the Help-Seeking condition is at odds with the conclusion that ingroup members tend to be reticent about receiving outgroup help (e.g., Nadler & Halabi, 2006). Although there is good reason for this reticence (because seeking help has the potential to emphasise negative traits such as dependency and inferiority: a point highlighted by both the anthropological/sociological and social psychological literatures), it is important not to lose sight of the relevance of the particular contexts within which group-related helping transactions occur.

These issues of meaning and context are particularly pertinent in this thesis: by moving beyond the conceptualisation of help-seeking as the simple engagement in a social interaction with the aim of gaining assistance, and instead considering how help-seeking can be deployed as a strategic tool, this work underlines the complexity and subtlety of group-related helping transactions, as well as highlighting the need for social identity theorists to consider the contexts and meanings associated with such acts. It is true that all-encompassing statements such as 'we prefer to help ingroup members' or 'we are reluctant to receive help from outgroup members' may be consistent with a social identity approach. Nonetheless, by adhering to such

statements strongly, social identity advocates risk adopting equally limited perspectives to those evident in much of the helping transaction research of the 1960s and 1970s. Just as the researchers working in this period neglected the important roles played by group memberships and strategy in helping transactions (which limited the contributions they could make to our understandings of this domain), modern social identity theorists risk neglecting the significance of context (and content) in their work.

Of course, it is unlikely that engagement in helping transactions will always be born out of strategic motivations (and, when such strategy does occur, that it will always be group-related). Nonetheless, the studies in this thesis have shown that strategy has the potential to play an important role in governing group members' help-seeking behaviour, and that a full appreciation of this idea involves consideration of the relevance of context and meaning. This observation is in-keeping with the subtle and rich anthropological and sociological research outlined at the opening of this thesis. Indeed, it would be beneficial for social psychologists to also strive for such subtlety and richness in their own accounts of the helping transaction.

The Conceptualisation of Help-Seekers

As well as having implications for how the act of helping is understood, the studies in this thesis also have implications for how *help-seekers* are conceptualised. As mentioned previously, help-seekers and help-receivers have generally received little attention in the social psychological literature: they have (implicitly) been labelled the less interesting party in the helping transaction, since they *lack* the skills and knowledge they currently require (unlike help-givers, who *possess* such qualities), (e.g., DePaulo et al., 1983). While an important aim of this thesis was to increase the amount of attention paid to help-seekers in contemporary social identity-based social

psychological research, this work was also intended to challenge how help-seekers are *conceptualised*. By envisaging help-seekers as group members who, like the help-givers in Hopkins et al.'s (2007) work, wish to enhance and promote the ingroup's image through their behaviour, this work recognises help-seekers' cognitive sophistication. Like helpers, help-seekers can behave strategically when participating in helping transactions, and are likely to have well-developed understandings of what constitutes a potentially-effective stereotype-challenging behaviour in a particular context (see Study 6 in this thesis). This indicates that (as mentioned above), help-seekers consider the *contents* of salient meta-stereotypes (rather than just their negative valence and threatening manner) before deciding how best to engage in help-seeking (or any other strategic behaviour). The findings from the studies in this thesis thus help to advance understandings of the nature of group-related help-seeking, and to provide a stronger appreciation of the cognitive sophistication involved in such acts. These conclusions have implications for both the literature and for real-world helping transactions.

Implications for the literature. In terms of the social psychological literature, these conclusions highlight the need to provide help-seekers with a larger and more prominent place on the social identity research agenda (whilst also avoiding overly-general assumptions such as 'we avoid seeking outgroup help'). By incorporating concepts such as strategy and context, and by tapping into the rich anthropological and sociological work outlined earlier in this thesis, social identity theorists have the ability to gain a richer understanding of the processes and motives involved in helping transactions, as well as a larger appreciation of the important role played by help-seekers in such interactions. This has the potential to advance social psychological theory and research.

Moreover, since psychological theory informs and influences other domains (e.g., political and social policy, the media and the press, corporations and businesses, etc.), the implications of these theoretical advancements could be important and far-reaching. For instance, the research in this thesis could be used to help re-frame how the act of help-seeking (and thus help-seekers themselves) are conceptualised, thereby helping to reduce the stigma that often surrounds this topic. This endeavour could have numerous practical outcomes. For example, campaigns that encourage men to consider the negative ways in which they are stereotyped due to their unwillingness to seek help (i.e., as childish rather than strong, Seymour-Smith et al., 2002) have the potential to increase the likelihood of men approaching their doctors for advice about health concerns. Similarly, telling a company's employees that a rival company perceives them as weak because they are unwilling to discuss their problems with others may increase the utilization of workplace counselling services.

Similar strategies may be used to increase the incidence of prosocial and giving behaviour. For instance, highlighting the idea that the Scots are perceived as irresponsible litter-louts by relevant outgroups (e.g., the English) could help reduce littering and increase prosocial acts of litter collection (such as the 'National Spring Clean', *Keep Scotland Tidy*, n.d.). The same logic could be applied to issues of racism within communities: campaigns involving the suggestion that the English perceive the Scots as racist and unwilling to help ethnic minorities within their community could help promote cross-race solidarity and increase the success of pre-existing schemes such as Scotland Against Racism (*Scotland Against Racism*, n.d.). The benefits of such projects and campaigns for people's health, wellbeing and general quality of life are likely to be significant.

Implications for 'the real world'. In terms of real-world helping transactions, this research may help shed more light on help-seekers' and help-receivers' motives for accepting and refusing help. Other researchers who also conceptualise the helping transaction as a way for the ingroup's personal aims to be met have usefully applied their work to empirical examples of conflict-ridden intergroup interactions (e.g., Nadler's Ingroup Helping as Status Relations model, which has been applied to Arabs and Israelis), (e.g., Nadler, 2010; Nadler & Halabi, 2006). The potential exists for the research in this thesis to be applied in a similar manner. By gaining an appreciation of how ingroup members believe their group is perceived by the relevant outgroup (and how ingroup members might go about challenging such perceptions), rich and complex accounts of real-world helping transactions could be produced, and context-specific ideas for mediation and conflict-reduction could be developed.

For instance, this work could be used to reduce incidences of the 'Pay Me' phenomenon, whereby developing communities refuse to accept assistance from developed nations unless they are paid (or otherwise reimbursed) for their participation in aid projects (see Chapter 1, e.g., Carr et al., 1998). By understanding the implications that accepting such assistance might have for the developing communities' image in the eyes of other groups (and how receiving such help might confirm negative stereotypes about the group in question), aid workers can begin to appreciate the motivations behind the 'Pay Me!' phenomenon, and how it can be addressed. For instance, this might involve re-framing the helping transaction in a way that reduces the chance of the developing community's image being tarnished after they receive the assistance. On a larger scale, it might even involve working with the developing community to enable them to improve their image on the world stage, thereby allowing future aid transactions to occur in a better socio-political climate,

with the act of help-receiving being less likely to threaten how the community is perceived. Such endeavours would require aid workers to understand the important (yet subtle) roles played by both image concerns and social context in intergroup helping transactions. Nonetheless, engaging with such issues would have the potential to promote fundamental change in terms of how both parties perceive the helping transaction. If the act of help-receiving can be re-framed in more positive terms (as it was in the final two studies in this thesis) and needful groups are provided with opportunities to strengthen their image and reputation, the stage is set for more positive, effective and satisfying future helping transactions.

Limitations and Future Directions

Although the studies in this thesis possess a number of important strengths (most notably, the predicted results were obtained via the utilization of behavioural measures, three social identities and various experimental methodologies), they represent an initial (and somewhat exploratory) investigation of the strategic help-seeking hypothesis. A number of limitations and outstanding issues thus remain, many of which could be usefully addressed by future research.

The Nature of Study 3's Intergroup Condition

Study 3 is key in this thesis, because it revealed a significant result when the Meta-Stereotype Salient and Intergroup conditions were compared (i.e., high ingroup identifiers sought less help in the Meta-Stereotype Salient condition than in the Intergroup condition). This was interpreted as strong evidence in favour of the strategic help-seeking hypothesis, since it indicates that a salient meta-stereotype has effects on participants' help-seeking behaviour that are additional to the effects created by a 'purely' intergroup context. Nonetheless, Study 3 revealed a non-significant difference in help-seeking levels between the Intergroup and Interpersonal

conditions, which cast doubt on the strength of the intergroup context that featured in the Intergroup condition. A strong intergroup context should ideally have led to lower levels of help-seeking in the Intergroup condition than in the Interpersonal condition (as in Study 2), but this was not the case in Study 3. Since the logic of the key Meta-Stereotype Salient vs. Intergroup result in Study 3 hinged on the assumption that the Intergroup condition featured a salient intergroup context, this finding was potentially problematic, and may have related to the nature of the text passage presented to participants in the Intergroup condition diluting the strength of the intergroup context (see Study 3).

However, the important Meta-Stereotype Salient vs. Intergroup result in Study 3 was corroborated in the final study in this thesis (Study 7). Although both conditions in Study 7 featured a salient meta-stereotype, only the Help-Seeking meta-stereotype could be challenged effectively by seeking help (see Study 6). This was interpreted as showing that participants in the Meta-Stereotype Salient condition in Study 3 and in the Help-Seeking condition in Study 7 were likely to have similar experiences of the helping transaction (since both conditions involved a salient meta-stereotype that was potentially challengeable via strategic help-seeking). Moreover, participants in the Intergroup condition in Study 3 and in the Charity condition in Study 7 were likely to have similar experiences of the helping transaction (since both conditions involved either a ‘purely’ intergroup context or an intergroup context with an un-challengeable meta-stereotype, which should have led participants to focus instead on the intergroup element of the transaction). In light of these observations, the finding that strong identifiers sought more help in the Help-Seeking condition than in the Charity condition in Study 7 helped corroborate the conclusion from Study 3 that a salient (and challengeable) meta-stereotype affects participants’ help-seeking

behaviour in a way that an intergroup context does not. This conclusion enables the work in this thesis to provide strong evidence in support of the strategic help-seeking hypothesis. Nonetheless, future work should continue to explore the qualitative differences between intergroup contexts and contexts featuring explicitly-salient meta-stereotypes, and how these elements might interact to affect group members' strategic behaviour. Since intergroup contexts are at the heart of meta-stereotyping (e.g., Vorauer et al., 2000), it is important to understand the respective roles of both elements.

Success of Stereotype-Challenging Attempts

Addressing a separate issue, it is important to remember that although strong evidence has been provided in this thesis to suggest that group members engage in strategic help-seeking, no comment can be made regarding the *effectiveness* of participants' attempts to challenge the salient meta-stereotypes (i.e., whether their help-seeking actually contributes to enhancing the ingroup's image in the eyes of the outgroup). There is evidence to suggest that stereotypes tend to be very persistent, and that successful stereotype change only results from repeated (and consistent) stereotype-challenging attempts on the behalf of ingroup members (Klein & Snyder, 2003). This suggests strategic behaviour will not always be successful in challenging the outgroup's perceptions of the ingroup. In turn, knowledge of the success (or failure) of their challenging attempts are likely to affect how ingroup members engage with outgroup members in the future, which has implications for how outgroup members perceive the ingroup. Since meta-stereotypes are propagated (or extinguished) via social interaction (Klein & Snyder, 2003), the outcome of strategic meta-stereotype challenging attempts have important implications for future intergroup relations: something that could be usefully explored by future research.

Intragroup Help-Seeking

Another important issue which was not pursued in-depth (due to the fact it was beyond the scope of this thesis) is the threat experienced during *intragroup* help-seeking in the context of a salient meta-stereotype. Although this issue was hinted at in Study 1 (and pursued in Studies 4 and 5), the focus of these latter studies was on group members' strategic help-seeking in intergroup contexts, and how their experiences of seeking help in such contexts differs from the experiences associated with seeking ingroup help. The finding that seeking ingroup help in such contexts may be avoided to the same extent as seeking outgroup help was an intriguing finding. Although possible explanations were forwarded (most notably, the idea that seeking ingroup help has the potential to damage one's personal image as an ingroup member in the eyes of fellow ingroup members), future studies should investigate the processes through which salient meta-stereotypes affect intragroup help-seeking, and consider the implications of this for the strategic help-seeking hypothesis.

Help-Seeking as a Strategic Behaviour

It should also be remembered that a wide variety of stereotypes exist, and, like the Charity stereotype made salient in Studies 6 and 7, not all of them are likely to be challenged effectively by manipulating one's help-seeking behaviour. Future studies could thus usefully attend to alternative strategic behaviours, and consider the situations in which different behaviours are likely to be perceived as effective. Nonetheless, it is the case that the concept of dependence is at the root of many stereotypes (e.g., the stereotype that women are emotional and have a poor sense of direction, or the stereotype that members of ethnic minority groups are lazy and overly-reliant on White people for support). Indeed, the finding that people characterize others in terms of their positioning on the two key dimensions of

competence and warmth (Fiske et al., 2007; Fiske, Cuddy, Glick, & Xu, 2002) suggests that many stereotypes are likely to involve conceptualising the outgroup as warm yet incompetent- the optimal combination to promote a sense of submissiveness, dependency and over-reliance on others. In such cases, strategic help-seeking (in the form of help-refusal in this context) may be perceived as an effective stereotype-challenging strategy. It may therefore be the case that strategic help-seeking is a rather commonly-used image-management tool. Future work could investigate the range of stereotypes that group members may attempt to challenge through the use of strategic help-seeking, as well as considering situations in which alternative challenging strategies might be utilized.

Enhancing the Group's Image vs. Enhancing One's Personal Image

Another important question to consider when examining any social identity-related research involves the issue of exactly how the participants conceptualised the experimental situation. While it was assumed that participants in these studies engaged in strategic intergroup help-seeking with the aim of enhancing the ingroup's image, it is also possible they may have been attempting to enhance their *personal* image (as individuals) through such behaviour. For instance, rather than attempting to show that '*women are not dependent*', participants could have been attempting to show that '*women might be dependent, but I am not*'. While social identity theorists would focus their attentions on the former possibility, it is important to remember that the latter possibility exists, and also has the potential to affect group members' behaviour (see Klein et al., 2007, for a discussion of this issue in the context of identity performance). Whilst care was taken in the studies in this thesis to promote the salience of participants' social identities (and the fact that level of ingroup identification was found to play an important role in a number of the studies speaks to

the success of this endeavour), it should be remembered that the reasons behind group members' behaviour are likely to be more complex and multi-faceted than those revealed by these experiments.

The Nature of the Audience

Finally, it is important to remember that the nature of the audience who witnesses ingroup members' displays of group-related image-management is variable and ambiguous. While the studies in this thesis involved presenting participants with concrete examples of outgroup or ingroup members ostensibly able to observe their behaviour, this may not be a prerequisite for stereotype challenging behaviour to occur. For instance, it may be the case that (highly-identifying) ingroup members are motivated to challenge such stereotypes in the absence of a concrete audience. The social identity approach suggests that group members form cognitive representations of the ingroup, allowing them to feel connected to (and part of) the group when they are alone (e.g., Turner et al., 1987). This could mean that, even in the absence of an audience, a group member will be motivated to prove to him/herself that '*we are not really like that*', thereby enhancing their own personal opinion regarding the group's image. Nonetheless, such effects are likely to be stronger in the presence of a specific audience, since such a situation would involve the ingroup member's behaviour being observed by others. As discussed in this thesis, an audience could have implications for the group's image (in the case of an outgroup audience), or for the ingroup member's image (in the case of an ingroup audience). Future work on this topic could usefully attend to the important issue of audience, and how it affects ingroup members' strategic behaviour.

Concluding Comments

“After the verb ‘to love,’ ‘to help’ is the most beautiful verb in the world.”

- Bertha Von Suttner (Nobel Peace Prize winner).

“Refusing to ask for help when you need it is refusing someone the chance to be helpful.”

- Ric Ocasek (musician and poet).

The quotations above highlight some of the commonly-held beliefs about the helping transaction (See Chapter 1): that it is inherently pure, beneficial, and even magical and beautiful. While it is important not to lose sight of the fact that helping transactions can be imbued with such qualities, the work presented here suggests that an important caveat must be placed on these somewhat idealised assumptions. This thesis has conceptualised the helping transaction in a specific manner, which is rather at-odds with the quotations above: specifically, it has been shown to be a way for group members to enhance and protect the ingroup’s image. Although the focus of this work has been on how help-seeking may be used to achieve this goal, the same issues have been discussed with reference to help-giving. This work has thus presented a highly strategic conception of both sides of the helping transaction.

However, it is certainly far too simplistic to state that this strategic element makes all helping transactions inherently ‘bad’. While much of Chapter 1 highlighted the negative aspects of giving and receiving help in the real-world, it also (implicitly) showed how important such assistance can be: just because a developing community wishes to be paid for participating in an aid project does not mean that the project will have no positive impact. On the contrary, such assistance has the potential to both transform and save lives. This observation creates a dilemma: is it acceptable to

condone and promote helping transactions that have the power to enhance lives, yet also have the power to tarnish images? While these are no easy answers, the work in this thesis offers at least some hope. By highlighting the fact that, like help-givers, help-recipients also behave strategically, and can decide when it is (and is not) in their interests to accept assistance, this work suggests that the ‘damage’ caused by help-giving can sometimes be minimized by the recipients themselves. Indeed, far from simply minimizing damage, this thesis has shown that acts of help-receiving might be used to *enhance* the group’s image and reputation. This means that, in some cases at least, help-seekers and help-receivers have the ability to exercise relatively high levels of agency within the transaction, and balance the wellbeing-related and image-related implications of receiving assistance. While this does lead to the possibility of much-needed help being refused in some cases, it also enables help to be sought and received on the recipient’s own terms. Indeed, the ‘fairest’ and ‘best’ helping transactions are likely to occur when this (somewhat precarious) balance between material- and image-related benefits is most optimal for the recipient. The work in this thesis would suggest that it is this type of transaction that we should encourage and promote.

In summary, this thesis was intended to highlight the complexity of a ubiquitous yet fascinating social interaction, and to enable appreciation of the image-related motives that groups may have for engaging in such transactions. Such work has the potential to enhance the experiences of both help-givers and help-receivers, allowing much-needed assistance to be offered and accepted, whilst remaining sympathetic to issues of image-management and presentational concerns. Since we all have a lifetime of experiences of being on both sides of the transaction, this is surely a goal we can all appreciate, and to which we all can relate.

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Appendix 1: Details of Statistical Analyses Used in the Thesis

Two types of statistical analysis are central to this thesis: moderation analysis and conditional indirect effects analysis. The aim of this Appendix is to briefly review the logic behind these two analyses, how they are carried out in SPSS, and how their respective outputs are interpreted.

Moderation Analysis

Logic

Moderation has been described as ‘different slopes for different folks’ since it refers to variables (e.g., sex, age, social class or identification strength) which affect the nature of the relationship between an Independent (or predictor) Variable (IV) and a Dependent (or outcome) Variable (DV), (Baron & Kenny, 1986, see Figure A1).

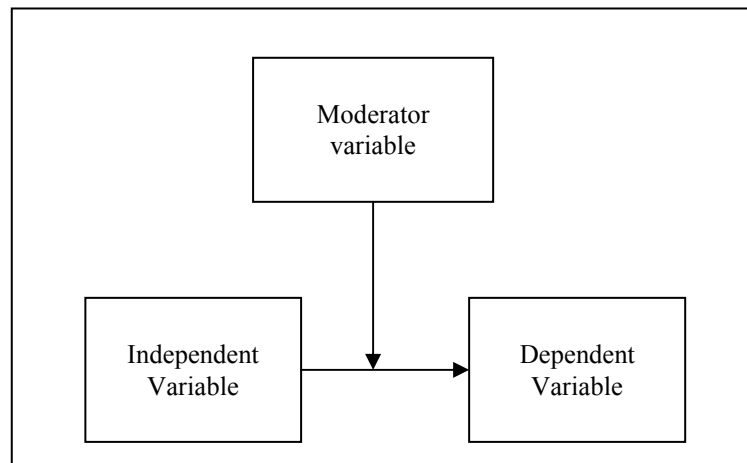


Figure A1. Simple moderation analysis.

For instance, it may be that the IV has a significant effect on the DV, but only for particular ‘folks’ (e.g., only female participants, or only those who identify highly

with the ingroup). Alternatively, it may be that the IV affects the DV differently depending on the particular types of ‘folk’ that are examined. Moderation analysis enables such possibilities to be investigated and explored.

Obtaining Evidence of Moderation

Analysis

To investigate moderation in this thesis, regression analysis was used. Initially, the IV and the (potential) moderator variable were both converted into *z*-scores (calculated by subtracting the mean from the raw score, and then dividing by the standard deviation). This reduces the risk of *multicollinearity* (high levels of correlation between variables in a regression analysis), (Aiken & West, 1991). This procedure produces a standardized variable with a mean of 0 and a standard deviation of 1. The standardized IV and the standardized (potential) moderator were then multiplied together, producing an interaction term.

Regression analysis was then performed. The standardized IV and standardized (potential) moderator variables were entered into the first block of the regression using the Enter method. The interaction term (standardized IV X standardized potential moderator) was entered into the second block of the regression. These variables were then regressed onto the DV.

Checking Assumptions

Before interpreting the results, the data were checked to ensure they met the assumptions of regression analysis. Specifically, tolerance and variance inflation factor (VIF) values were calculated to check for multicollinearity. If all tolerance values exceeded the critical value of 0.2 (Menard, 1995) and no VIF values exceeded the critical value of 10 (Myers, 1990), the data were deemed to meet the assumptions of regression analysis, and the results could be interpreted legitimately.

Interpreting Results

After taking account of the variance explained by the standardized IV and the standardized (potential) moderator variables individually, the interaction term between the standardized IV and the standardized (potential) moderator variable was examined. If this interaction term was found to explain a significant portion of the variance in the data, evidence of moderation was said to be obtained.

Simple Slopes Analysis

If evidence of moderation was obtained, then *simple slopes analysis* was carried out in order to graphically represent how the moderator variable affected the relationship between the IV and the DV. This was achieved using Preacher et al.'s (2003) online simple slopes calculator, which requires the researcher to enter the coefficients, coefficient variances and coefficient covariances from the SPSS regression output. If the moderator variable was dichotomous, the plotting involved analysing the effect of the IV on the DV at both levels of the moderator (as in Figure A2). If the moderator variable was continuous, the plotting involved analysing the effect of the IV on the DV at high levels of the moderator (one standard deviation above the mean) and low levels of the moderator (one standard deviation below the mean). These slopes were plotted across the range of the IV (either from the lowest observed value to the highest observed value if the IV was continuous, or, if the IV was dichotomous, at the two relevant values), to examine the effect of the interaction between the IV and the moderator variable on the DV. As well as allowing these simple slopes to be plotted, the calculator also provides information pertaining to the statistical significance of the two slopes, enabling conclusions to be reached about the nature of the moderating effect.

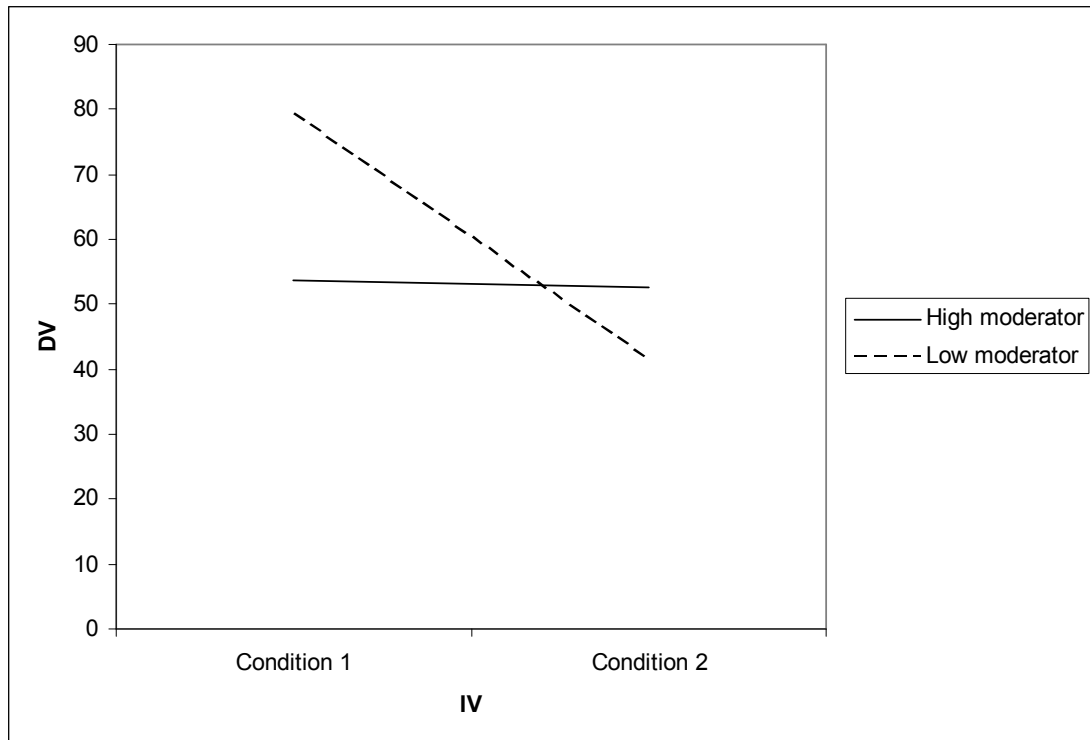


Figure A2. An example simple slopes graph, where the effect of the IV (condition: two levels) on the DV is plotted at high and low levels of the moderator.

In studies where the IV was experimental condition (i.e., a dichotomous variable), the simple slopes analysis revealed across-condition effects (e.g., in Figure A2, the difference in DV levels between participants in Condition 1 and Condition 2 for whom the moderator is high, and the difference in DV levels between participants in Condition 1 and Condition 2 for whom the moderator is low). In cases where within-condition analysis was also required (e.g., in Figure A2, the DV levels for Condition 1 participants for whom the moderator is high, compared with Condition 1 participants for whom the moderator is low, and the DV levels for Condition 2 participants for whom the moderator is high, compared with Condition 2 participants for whom the moderator is low), the simple slopes analysis was repeated after swapping the IV and the moderator variables (so that the original IV became the new moderator and the original moderator became the new IV). This re-focuses the

analysis from across-condition to within-condition, so that the significance of the two within-condition slopes can be analysed (although the four values presented in the graph remain the same: it is simply the nature of the comparison that changes).

Conditional Indirect Effects Analysis

Logic

Indirect effects analysis involves investigating the processes (or variables) through which the IV (or predictor variable) affects the DV (or outcome variable), (Preacher & Hayes, 2008). The aim of such analyses is to show that the IV indirectly affects the DV through a mediator variable (e.g., that experimental condition indirectly affects help-seeking via perceived meta-stereotype trait unfairness). In *conditional indirect effects analysis*, the indirect effect of the IV on the DV through a mediating variable is found to be dependent on the level of a moderating variable (e.g., experimental condition indirectly affects help-seeking via perceived meta-stereotype trait unfairness, but only for high ingroup identifiers), (Preacher et al., 2007).

Analysis

To carry out conditional indirect effects analysis in this thesis, Preacher et al.'s (2007) MODMED SPSS macro was used. This is a piece of syntax that enables conditional indirect effects models to be specified, and their significance calculated. The macro can test for five types of model, but only one is relevant for this thesis: Model 3 (when the path between the mediator and the DV is moderated: see Figure A3).

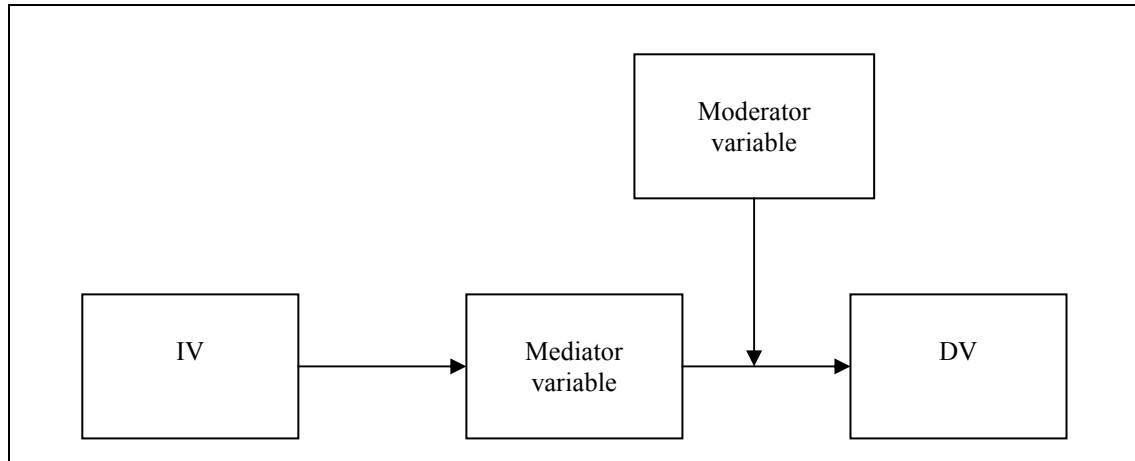


Figure A3. The conditional indirect effects model explored in a number of studies in this thesis.

Interpreting Output

When a Model 3 analysis was presented in this thesis, the coefficients, standard errors and *t*-values (and significance levels) were presented as in Table A1.

There are two important issues to consider when examining this output. First, it should be noted that each individual variable within the model has a role to play in affecting the relationships between all of the other variables: the model is *interactive*.

Table A1.
Annotated example of conditional indirect effects output.

Predictor	<i>Coeff.</i>	<i>SE</i>	<i>t</i>
DV = Mediator (this is the extent to which the predictor variables predict the <i>mediator</i>)			
1. Constant (the constant in the analysis: not required to interpret results)			
2. IV (this is the extent to which the IV predicts the <i>mediator</i>)			
DV = DV (this is the extent to which the predictor variables predict the <i>DV</i>)			
3. Constant (the constant in the analysis: not required to interpret results)			
4. IV (this is the extent to which the IV predicts the <i>DV</i>)			
5. Moderator (this is the extent to which the moderator predicts the <i>DV</i>)			
6. Mediator (this is the extent to which the mediator predicts the <i>DV</i>)			
7. Mediator X Moderator (this is the extent to which the mediator X moderator interaction predicts the <i>DV</i>)			

Second, Preacher et al. (2007) note that for a Model 3 analysis to be significant, two specific paths should be shown to be significant: i) the path from the IV to the mediator (row 2 in the Table A1; the a_1 path in the Figure A3) and ii) the path from the interaction between the moderator and mediator to the DV (row 7 in the Table A1; the b_3 path in the Figure A3). Obtaining significant values for both these paths indicates that the IV predicts the mediator, and, in turn, the extent to which the mediator predicts the DV is dependent on the level of the moderator.

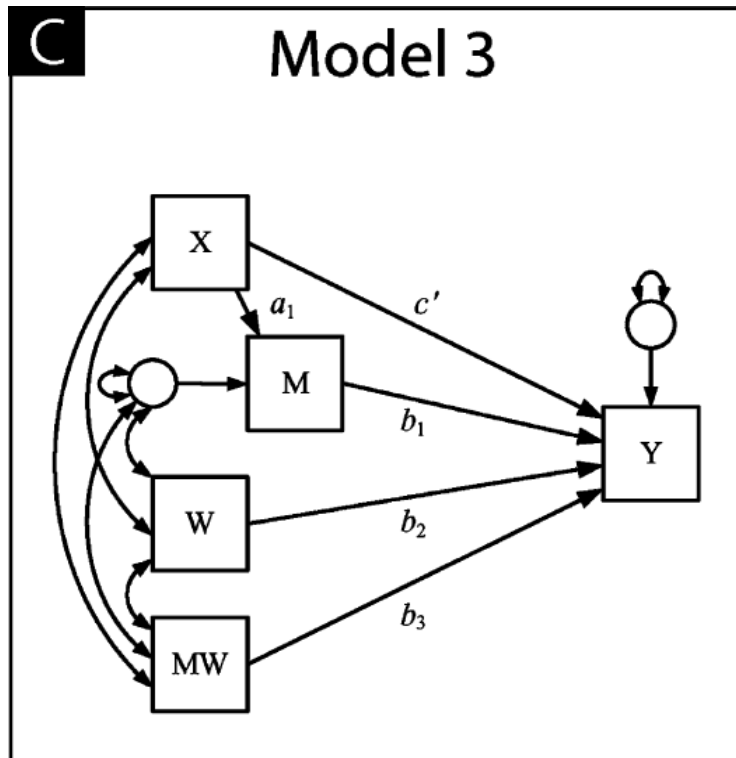


Figure A4. From Preacher et al. (2007, p. 194), reproduced with permission: The conditional indirect effects model explored in a number of studies in this thesis, where the path between the IV (X) and the DV (Y) is mediated by M, and the path between X and M is moderated by W. The key paths for consideration are labelled a_1 (the path from the IV to the mediator) and b_3 (the path from the interaction between the mediator and the moderator (MW) to the DV). Circles represent error terms, and are not required to interpret the results.

Bootstrapping Analysis

To examine exactly how the moderator variable affected the relationship between the IV and the DV (via the mediator variable) in the model, bootstrapping analyses were used. Bootstrapping is a statistical procedure which involves re-sampling the data many times and then running statistical analyses on the re-sampled data. This re-sampling principle, combined with the fact that bootstrapping involves no assumptions regarding the distribution of the data (Preacher et al., 2007), makes it particularly suitable for use with small or skewed samples. In all analyses in this

thesis, the recommended number of 5000 bootstrapping samples was used (Preacher & Hayes, 2008).

Thus, in the case of conditional indirect effects analysis, bootstrapping analysis was used to estimate the nature of the indirect effect of the IV on the DV (via the mediator variable) at specific levels of the (standardized) moderator variable. If the moderator variable was dichotomous, then the effect was examined at the two levels of the moderator. If the moderator variable was continuous, then the effect was examined at both high (one standard deviation above the mean) and low (one standard deviation below the mean) levels of the moderator. In all studies, the bias corrected and accelerated confidence intervals (obtained from the bootstrapping analysis) were used to determine the significance of the indirect effects model at these particular levels of the moderator variable. Bias corrected and accelerated confidence intervals are adjusted to deal with skew and small sample size, making them ideal for use in this thesis (Preacher et al., 2007). A significant result ($p < .05$) is obtained if zero does not fall between the Upper and Lower Confidence Intervals; e.g., an Upper Confidence Interval of -.0123 and a lower Confidence interval of -.0034 would indicate a significant result (as would the values .0123 and .0034), while an Upper Confidence Interval of -.0234 and a lower Confidence interval of .0324 would indicate a non-significant result (for more information, see Preacher et al., 2007). A significant result would thus indicate that the indirect effect of the IV on the DV via the mediator variable is significant at the particular level of the moderator variable that was specified during the conditional indirect effects analysis.

Regression and Simple Slopes Analysis

Finally, to create a graphical representation of the moderator variable's effect on the relationship between the mediator variable and the DV in the latter part of

Model 3, regression and simple slopes analysis was used (see the procedure in the section on moderation analysis above). In the regression analysis, the IV was the mediator from the conditional indirect effects analysis, while the moderator and DV were the same as the moderator and DV from the conditional indirect effects analysis; see Figure A4).

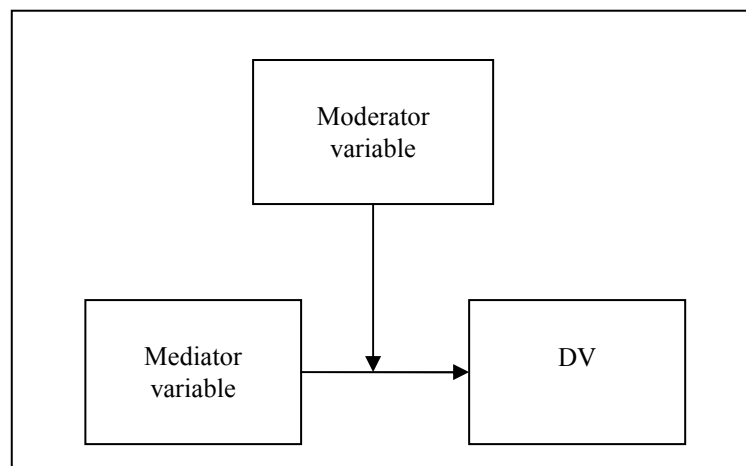


Figure A5. The portion of the conditional indirect effects model examined via regression and simple slopes analysis. The mediator variable from the conditional indirect effects analysis becomes the IV in the regression analysis, while the moderator variable and DV remain unchanged.

However, since the results obtained for the mediator X moderator interaction in the conditional indirect effects analysis also take the effect of the IV into account, the IV from the conditional indirect effects analysis was controlled for by also including it in the regression analysis (although no IV-related results were used in the simple slopes analysis: it was simply included as a statistical control). This procedure thus created a graphical representation of the effect of the moderator variable on the relationship between the mediator variable and the DV (after controlling for the IV),

thereby helping to corroborate and clarify the results of the conditional indirect effects analysis.

Appendix 2: Materials Presented in Study 1

(Phrases before slashes (‘/’) indicate the wording used in the Gender condition.

Phrases after slashes indicate the wording used in the Psychologist condition.)

Career Opportunities Questionnaire

One of my areas of interest is women’s/Psychologists’ career opportunities, and an important area of research within this topic is the issue of women/Psychologists in business. I’m interested in investigating participants’ views about career women/Psychologists who go into business careers. This is important research, since a large number of female/Psychology graduates decide to go into the world of business, rather than remaining in academia. With this research, I hope to find out more about the thoughts, ideas and feelings that participants associate with women/Psychologists in business.

Please turn over and answer the questions that follow. >

XIII

1. What is your sex?/What year of your Psychology degree are you in?

2. I would like to know a little bit more about your general views of women/Psychologists. Please indicate the extent to which you agree that women/Psychologists possess the following attributes, by circling the relevant number. Please use the following rating scale:

0	1	2	3	4
Strongly Disagree	Disagree a little	Neither Disagree nor Agree	Agree a little	Strongly Agree

To what extent do you agree that women/Psychologists are...?

a) Kind	0	1	2	3	4
b) Aggressive	0	1	2	3	4
c) Hostile	0	1	2	3	4
d) Compassionate	0	1	2	3	4
e) Argumentative	0	1	2	3	4
f) Caring	0	1	2	3	4
g) Forceful	0	1	2	3	4
h) Warm	0	1	2	3	4

3. Please read the following vignette carefully, and try to imagine yourself in the situation as best as you can.

Imagine yourself five years from now. After graduating, you began work at a large advertising agency, and you have recently been promoted to a more senior position within your department. Although you really enjoy your job, you have been rather overwhelmed by the amount of extra work that you have to complete in your new position. Recently, you have been finding that you have less and less free time to spend with your family and friends, and you have started to take more and more work home with you in the evenings. Doing this has made you feel tired and ill: you are struggling to sleep well and you often forget to eat properly. You have an increasingly strong feeling that you are unable to cope with the increased workload and the extra demands that have been placed upon you, and you worry that your promotion could be at stake if you cannot meet your department's high standards. You realise that there are a number of ways that you could try to improve the situation. One possibility is to seek advice or help from someone else. There are numerous people in your department that you could approach. One of these people is Mark Williams. Mark graduated from Edinburgh University with a 2:1 in Psychology, and was a keen member of the university rugby team. After graduation, Mark went on to be employed as a psychological researcher. He has worked in your department for almost 3 years. You attempt to decide whether or not to approach Mark for advice or assistance with your problem.

4a) **If you were in this situation, how likely would you be to disclose your concerns to Mark?**

0	1	2	3
Not at all likely	A little likely	Moderately likely	Very likely

b) **If you were in this situation, how likely would you be to seek help from Mark?**

0	1	2	3
Not at all likely	A little likely	Moderately likely	Very likely

c) **If you were in this situation, how likely would you be to share your worries with Mark?**

0	1	2	3
Not at all likely	A little likely	Moderately likely	Very likely

d) **If you were in this situation, how likely would you be to seek advice from Mark?**

0	1	2	3
Not at all likely	A little likely	Moderately likely	Very likely

e) **Please rate the extent to which you agree that Mark possesses the following traits, by using the following rating scale:**

0	1	2	3	4
Strongly Disagree	Disagree a little	Neither Disagree nor Agree	Agree a little	Strongly Agree

To what extent do you agree that Mark is...?

i)	Sympathetic	0	1	2	3	4
ii)	Threatening	0	1	2	3	4
iii)	Helpful	0	1	2	3	4
iii)	Understanding	0	1	2	3	4
iv)	Judgemental	0	1	2	3	4
v)	Empathic	0	1	2	3	4

- f) **What initial thoughts/feelings/ideas come to mind when you think about seeking advice or help from Mark? You can be as vague or as specific as you wish.**

1. _____

2. _____

3. _____

4. _____

5. _____

5. Imagine you decide to seek help from Mark.

When you seek his help, **to what extent...**?

a) Would he think of you as a work colleague?

0	1	2	3
Not at all	A little	A moderate amount	A lot

b) Would he think of you as a Psychologist?

0	1	2	3
Not at all	A little	A moderate amount	A lot

c) Would he think of you as a woman/man?

0	1	2	3
Not at all	A little	A moderate amount	A lot

d) To what extent would seeking help from Mark lead to confirmation of stereotypes about males and females?

0	1	2	3
Not at all	A little	A moderate amount	A lot

6a) How similar is Mark to you?

0	1	2	3	4
Very dissimilar	A little dissimilar	Neither dissimilar nor similar	A little similar	Very similar

b) How typical is Mark of other men?

0	1	2	3	4
Very atypical	A little atypical	Neither atypical nor typical	A little typical	Very typical

c) How typical is Mark of other Psychologists?

0	1	2	3	4
Very atypical	A little atypical	Neither atypical nor typical	A little typical	Very typical

7. When you seek Mark's help:**a) How would you feel?**

0	1	2	3	4
Very bad	A little bad	Neither bad nor good	A little good	Very good

b) How uncomfortable would you feel?

0	1	2	3
Not at all	A little	A moderate amount	A lot

c) How embarrassed would you feel?

0	1	2	3
Not at all	A little	A moderate amount	A lot

d) How indebted to Mark would you feel?

0	1	2	3
Not at all	A little	A moderate amount	A lot

e) How anxious would you feel?

0	1	2	3
Not at all	A little	A moderate amount	A lot

8. When you seek Mark's help, to what extent...?**a) Would it damage the reputation of you as a work colleague?**

0	1	2	3
Not at all	A little	A moderate amount	A lot

b) Would it damage the reputation of Psychologists?

0	1	2	3
Not at all	A little	A moderate amount	A lot

c) Would it damage the reputation of your gender group?

0	1	2	3
Not at all	A little	A moderate amount	A lot

9a) i) How unfair would it be if Mark described you as needy?

0	1	2	3	4
Very unfair	A little unfair	Neither unfair nor fair	A little fair	Very fair

ii) If Mark described you as needy, how strongly inclined would you be to disprove him?

0	1	2	3	4
Very disinclined	A little disinclined	Neither disinclined nor inclined	A little inclined	Very inclined

b) i) How unfair would it be if Mark described you as dependent?

0	1	2	3	4
Very unfair	A little unfair	Neither unfair nor fair	A little fair	Very fair

ii) If Mark described you as dependent, how strongly inclined would you be to disprove him?

0	1	2	3	4
Very disinclined	A little disinclined	Neither disinclined nor inclined	A little inclined	Very inclined

c) i) How unfair would it be if Mark described you as submissive?

0	1	2	3	4
Very unfair	A little unfair	Neither unfair nor fair	A little fair	Very fair

ii) If Mark described you as submissive, how strongly inclined would you be to disprove him?

0	1	2	3	4
Very disinclined	A little disinclined	Neither disinclined nor inclined	A little inclined	Very inclined

d) i) How unfair would it be if Mark described you as inferior?

0	1	2	3	4
Very unfair	A little unfair	Neither unfair nor fair	A little fair	Very fair

ii) If Mark described you as inferior, how strongly inclined would you be to disprove him?

0	1	2	3	4
Very disinclined	A little disinclined	Neither disinclined nor inclined	A little inclined	Very inclined

10. Please think about yourself as a member of your gender group, and rate your agreement with these statements, using the following scale:

0	1	2	3	4
Strongly Disagree	Disagree a little	Neither Disagree nor Agree	Agree a little	Strongly Agree

a) I often think about the fact that I am a member of this group.

0 1 2 3 4

b) The fact that I am a member of this group rarely enters my mind.

0 1 2 3 4

c) In my everyday life, I often think about what it means to be a member of this group.

0 1 2 3 4

d) I am not usually conscious of the fact that I am a member of this group.

0 1 2 3 4

Finally: Your initials: _____, your year of birth: 19__ __,

What year of your Psychology degree are you in?/What is your sex? _____

Appendix 3: Instructions and Materials Presented in Study 2

Verbal Instructions Given to Participants

(Phrases before slashes indicate the wording in the Interpersonal condition. Phrases after slashes indicate the wording in the Intergroup and Meta-Stereotype Salient conditions.)

- (Greet participant.)
- “So my study is investigating the factors that affect trait recall. There is some evidence that when traits are self-relevant, they are easier to remember. So this is what I’m investigating in my study. You’ll get a list of words that could apply to people/to men or to women, and you’ll be asked to recall them at the end of the study. That’s it- ok?”

(PARTICIPANT READS INFORMATION FORM AND SIGNS CONSENT FORM FOR ‘STUDY 1’. PARTICIPANT COMPLETES ‘STUDY 1’, WHICH CONTAINS THE MANIPULATIONS.)

- “Ok, that’s great. So in 15 minutes’ time, I’ll give you a little recall test, to see which of those traits you remembered. So, in the meantime, I was wondering if you would help me with something else? Some of the other researchers in the department are working on a study about learning skills, and have asked if I could try to recruit some participants for it. The study will take about 15 minutes, so we could do it before your recall test. Is that ok?”

- “Great. Ok, so this study is about how we acquire and develop skills. The skill that the researches are interested in is the ability to solve anagrams, which has actually been linked to the ability to think creatively, and the ability to do well in IQ and aptitude tests. So the study is interested with how we develop this skill. So one effective way to develop this skill would be to work on your own, and try to solve any problems you encounter. But it would also be perfectly fine to ask for help on anagrams that you find difficult, because this is also a very effective way to improve your skills, by understanding the processes others use to solve difficult anagrams. So both of these are really good ways of improving your skills.”
- “So, you are going to be given 10 anagrams, and will be asked to solve as many of them as you can in two minutes. After the two minutes are up, I’ll give you a form. In the form, you can write down if there are any anagrams that you would like to receive help on. These guys (*experimenter points to the photos on the wall*) are the researchers who made up the anagrams, so I’ll then pass your form onto them, and they’ll be able to give you any help, if you request it. I’ll give you a few more minutes to work on the anagrams while I’m doing that, because it’ll take them a couple of minutes to read through your form. Then they’ll come through and can give you any help you requested, and I’ll give you a couple of minutes to look over the help (if you requested it), and to make any changes to your answer sheet in light of that help. Then I’ll take your answer sheet for the guys to mark. The important thing, though, is that they aren’t really interested in how well you do overall with the anagrams. The researchers are mainly interested in how solving these

anagrams help your skills to improve, so don't panic if you find them difficult. Even if you find it really hard, your skills will still be developing as you work through the anagrams, and that's what the researchers are really interested in. Ok?"

(PARTICIPANT READS INFORMATION FORM AND COMPLETES CONSENT FORM FOR 'STUDY 2', WHICH CONTAINS THE MEASURES.)

- "Right, there are a couple of questions for you to answer about how good you are at puzzles before you get to the anagrams. So just let me know when you get to the page about the anagrams, and I'll start timing you. Ok?"

(PARTICIPANT COMPLETES 'STUDY 2', INCLUDING THE ANAGRAM TASK.)

- "Ok, so your time to work on the anagrams is up. I'm going to give you a form, which you can use to request as much or as little help from the guys as you like. After you do that, there are a few questions on the next page which ask about your experiences and opinions of the study. After you've answered everything, I'll take your booklet through to the guys, so that they can give you any help you asked for. You'll have another chance to look at the anagrams while I do that- ok?"

(PARTICIPANT COMPLETES CONSULTATION FORM AND MEDIATOR/MODERATOR ITEMS.)

- “Ok, so I need to give you the memory test for my study now, as I don’t want any more time to elapse before I do it. So I’ll get you to do that before I get any help you requested on the anagrams. So if you just answer the questions on this sheet, then that will be the study completed.

(PARTICIPANT COMPLETES RECALL TEST AND SUSPICION CHECK QUESTIONS, AND IS THEN DEBRIEFED AND COMPENSATED.)

Materials Presented to Participants

‘Study 1’: Interpersonal Condition Materials

How Well Do We Remember Traits?

1. Please rate the extent to which you think that you possess the following traits by circling the relevant number, **where 5 is the highest possible rating**. You will be asked to recall these traits later in the study.

0 _____ **5**
Not at all **Very Much**

To what extent do **you think you are...**?:

a) Dependent	0	1	2	3	4	5
b) Likeable	0	1	2	3	4	5
c) Inefficient	0	1	2	3	4	5
d) Needy	0	1	2	3	4	5
e) Conceited	0	1	2	3	4	5
f) Secretive	0	1	2	3	4	5
g) Inferior	0	1	2	3	4	5
h) Conventional	0	1	2	3	4	5
i) Unsystematic	0	1	2	3	4	5
j) Submissive	0	1	2	3	4	5

Finally, please create an identification code:

Your initials: ____

The year in which you were born: 19__

'Study 1': Intergroup Condition Materials**How Well Do We Remember Masculine and Feminine Traits?**

1. Firstly, we would like to ask you some questions about your views on your own gender group, to learn a bit more about you.

Please think about yourself as a woman, and rate the extent to which you agree with the statements below by circling the relevant number, **where 5 is the highest possible rating**:

0 5
Strongly disagree **Strongly agree**

- a) I often think about the fact that I am a woman.

0 1 2 3 4 5

- b) Overall, being a woman has very little to do with how I feel about myself.

0 1 2 3 4 5

- c) In general, being a woman is an important part of my self-image.

0 1 2 3 4 5

- d) The fact that I am a woman rarely enters my mind.

0 1 2 3 4 5

- e) I am not usually conscious of the fact that I am a woman.

0 1 2 3 4 5

- f) Being a woman is an important reflection of who I am.

0 1 2 3 4 5

- g) In my everyday life, I often think about what it means to be a woman.

0 1 2 3 4 5

2. Please rate the extent to which you think that women possess the following traits by circling the relevant number, **where 5 is the highest possible rating**. You will be asked to recall these traits later in the study.

0 _____ 5
 Not at all Very Much

To what extent are **women**...?:

a) Dependent	0	1	2	3	4	5
b) Likeable	0	1	2	3	4	5
c) Inefficient	0	1	2	3	4	5
d) Needy	0	1	2	3	4	5
e) Conceited	0	1	2	3	4	5
f) Secretive	0	1	2	3	4	5
g) Inferior	0	1	2	3	4	5
h) Conventional	0	1	2	3	4	5
i) Unsystematic	0	1	2	3	4	5
j) Submissive	0	1	2	3	4	5

Finally, please create an identification code:

Your initials: ____

The year in which you were born: 19__

'Study 1': Meta-Stereotype Salient Condition Materials**How Well Do We Remember Masculine and Feminine Traits?**

1. Firstly, we would like to ask you some questions about your views on your own gender group, to learn a bit more about you.

Please think about yourself as a woman, and rate the extent to which you agree with the statements below by circling the relevant number, **where 5 is the highest possible rating**:

0 5
Strongly disagree **Strongly agree**

- a) I often think about the fact that I am a woman.

0 1 2 3 4 5

- b) Overall, being a woman has very little to do with how I feel about myself.

0 1 2 3 4 5

- c) In general, being a woman is an important part of my self-image.

0 1 2 3 4 5

- d) The fact that I am a woman rarely enters my mind.

0 1 2 3 4 5

- e) I am not usually conscious of the fact that I am a woman.

0 1 2 3 4 5

- f) Being a woman is an important reflection of who I am.

0 1 2 3 4 5

- g) In my everyday life, I often think about what it means to be a woman.

0 1 2 3 4 5

2. Please rate the extent to which you think that *men* use the following traits to describe women by circling the relevant number, **where 5 is the highest possible rating**. You will be asked to recall these traits later in the study.

0 _____ 5
 Not at all Very Much

To what extent do **men describe women as...?**:

a) Dependent	0	1	2	3	4	5
b) Likeable	0	1	2	3	4	5
c) Inefficient	0	1	2	3	4	5
d) Needy	0	1	2	3	4	5
e) Conceited	0	1	2	3	4	5
f) Secretive	0	1	2	3	4	5
g) Inferior	0	1	2	3	4	5
h) Conventional	0	1	2	3	4	5
i) Unsystematic	0	1	2	3	4	5
j) Submissive	0	1	2	3	4	5

3. Now, please rate the extent to which you think that women actually possess the following traits, where **5 is the highest possible rating**.

0 _____ **5**
Not at all **Very Much**

To what extent **do you think women are...**?:

a) Dependent	0	1	2	3	4	5
b) Likeable	0	1	2	3	4	5
c) Inefficient	0	1	2	3	4	5
d) Needy	0	1	2	3	4	5
e) Conceited	0	1	2	3	4	5
f) Secretive	0	1	2	3	4	5
g) Inferior	0	1	2	3	4	5
h) Conventional	0	1	2	3	4	5
i) Unsystematic	0	1	2	3	4	5
j) Submissive	0	1	2	3	4	5

Finally, please create an identification code:

Your initials: ____

The year in which you were born: 19__

‘Study 2’: All Conditions**“A study of learning styles and skill acquisition”**

Firstly, we would like to ask you a few questions about yourself and your skills. Please circle the relevant answer/number for each question.

1. How often do you attempt creative puzzles of some kind (e.g., sudoku, crosswords, logic problems, etc.?)

0	1	2	3
Daily	Weekly	Monthly	Less often

2. How much do you enjoy thinking about and attempting puzzles?

0	1	2	3
Not at all	A little	Quite a lot	Very much

3. In your opinion, how good are your puzzle-solving skills?

0	1	2	3
Poor	Not too bad	Quite good	Excellent

4. How important do you think puzzle solving skills are?

0	1	2	3
Not at all	A little	Quite a lot	Very

“A study of learning styles and skill acquisition”

PARTICIPANT QUESTIONS

The next page contains ten anagrams. You will have two minutes to read through them, and answer as many as you can. Please write your answers in the space next to the anagrams.

Please turn the page when you are told you may start.

Anagrams

1. BNORW

2. LSNCPLEOKEG

3. EGTGIACHINN

4. EHNOY

5. NCOIRANTA

6. WCIFRULOALE

7. PPPUY

8. ONZICUMRI

9. VWSRDIRCREE

10. NRSATTUREA

“A study of learning styles and skill acquisition”

PARTICIPANT CONSULTATION FORM

Now that you have had two minutes to work on the anagrams, you may use this consultation form to ask for assistance (if you wish) on any of the anagrams.

This form will then be passed onto the group of researchers who devised the anagrams, so they can provide you with assistance.

You may continue trying to answer any unfinished anagrams during the couple of minutes that it will take for them to provide you with any help you require.

To ensure that the Research Assistants correctly provide you with the any help you may wish, please fill out some details about yourself for them:

Initials: _____

Sex*: _____

Date of birth: _____

* (Not included in the Interpersonal condition)

ASSISTANCE CONSULTATION FORM

**If you wish to receive assistance on any anagram/s, please
circle the relevant item/s below:**

How much assistance would you like?:

Anagram:

1. BNORW

0	1	2	3
None	A small hint	A large hint	Full answer

2. LSNCPLEOKEG

0	1	2	3
None	A small hint	A large hint	Full answer

3. EGTGIACHINN

0	1	2	3
None	A small hint	A large hint	Full answer

4. EHNOY

0	1	2	3
None	A small hint	A large hint	Full answer

5. NCOIRANTA

0	1	2	3
None	A small hint	A large hint	Full answer

6. WCIFRULOALE

0	1	2	3
None	A small hint	A large hint	Full answer

7. PPPUY

0	1	2	3
None	A small hint	A large hint	Full answer

8. ONZICUMRI0
None1
A small
hint2
A large
hint3
Full
answer**9. VWSRDIRCREE**0
None1
A small
hint2
A large
hint3
Full
answer**10. NRSATTUREA**0
None1
A small
hint2
A large
hint3
Full
answer

Now that you have finished answering all the questions, we would like to briefly ask you about your experiences and opinions.

1. How would you describe your feelings at this moment?

a)

0	1	2	3	4
Very bad	Quite bad	Neither bad or good	Quite good	Very good

b)

0	1	2	3	4
Very unpleasant	Unpleasant	Neither pleasant or unpleasant	Pleasant	Very pleasant

c)

0	1	2	3	4
Very tense	Tense	Neither tense or relaxed	Relaxed	Very Relaxed

d)

0	1	2	3	4
Very angry	Angry	Neither angry or calm	Calm	Very Calm

2. Please think about yourself as a woman, and rate the extent to which you agree with the statements below by circling the relevant number, where 4 is the highest:

0	1	2	3	4
Disagree strongly	Disagree	Neither disagree or agree	Agree	Agree strongly

- a) I often think about the fact that I am a woman.
0 1 2 3 4
- b) Overall, being a woman has very little to do with how I feel about myself.
0 1 2 3 4
- c) In general, being a woman is an important part of my self-image.
0 1 2 3 4
- d) The fact that I am a woman rarely enters my mind.
0 1 2 3 4
- e) I am not usually conscious of the fact that I am a woman.
0 1 2 3 4
- f) Being a woman is an important reflection of who I am.
0 1 2 3 4
- g) In my everyday life, I often think about what it means to be a woman.
0 1 2 3 4

3. Please rate the extent to which you agree with the statements below by circling the relevant number, **where 4 is the highest**:

0	1	2	3	4
Very unfair	unfair	Neither fair or unfair	fair	Very fair

How fair/unfair do you think it would be if someone described you as...?

a)	dependent	0	1	2	3	4
b)	tactful	0	1	2	3	4
c)	reliable	0	1	2	3	4
d)	submissive	0	1	2	3	4
e)	friendly	0	1	2	3	4
f)	needy	0	1	2	3	4

4. Please rate your agreement with the following statements by circling the relevant number, **where 4 is the highest**:

0	1	2	3	4
Disagree strongly	Disagree	Neither disagree or agree	Agree	Agree strongly

a) I think that a good man opens doors for women.

0 1 2 3 4

b) During a date, I would expect a man to pull out a chair for me so I could sit down.

0 1 2 3 4

c) I would expect a man I was out with to pay for my meal for me.

0 1 2 3 4

d) I like it when a man offers to help me on with my coat.

0 1 2 3 4

5. Please rate your agreement with the following statements by circling the relevant number, **where 4 is the highest**:

0	1	2	3	4
Disagree strongly	Disagree	Neither disagree or agree	Agree	Agree strongly

a) As a woman, the way that men perceive women upsets me.

0 1 2 3 4

b) As a woman, the way that men perceive women makes me angry.

0 1 2 3 4

c) As a woman, the way that men perceive women makes me happy.

0 1 2 3 4

d) As a woman, I feel the way that men perceive women is unjustified.

0 1 2 3 4

6. Without checking or looking back, can you remember the gender/s of the research assistants who were potential sources of help for you in the anagram task?

All female _____

All male _____

Some male and some female _____

Don't know _____

Finally, please create a unique identification code for yourself by filling in:

The first initial of your first name: _____

The first initial of your last name: _____

The last 2 digits of the year in which you were born: _____

'Study 1' Recall Test: All Conditions

1. Now please write down as many of the traits that you can remember, before turning over the page and answering the questions that follow:

2. Before reading this question, did you have any suspicions that this study and the problem-solving study you also participated in might be connected? _____

3. Even if you had no suspicions that the studies were connected, how would you guess they might be linked if they were connected?

4. To what extent do you feel that the men in the Social Psychology research group think about women in stereotypical terms (e.g., as dependent?)

0	1	2	3	4
Not at all	Not much	A	A lot	A very
		moderate		large
		amount		amount

Finally, please create an identification code:

Your initials: ____

The year in which you were born: 19__

Appendix 4: Instructions and Materials Presented in Study 3

Verbal Instructions Given to Participants

(Phrases before slashes indicate the wording in the Interpersonal condition. Phrases after slashes indicate the wording in the Intergroup and Meta-Stereotype Salient conditions.)

- (Greet participant.)
- “Thanks a lot for helping me out. What’s going to happen is that you’ll actually participate in two short studies today, rather than one long one. The first one is my study, and the second one is my advisor’s study. They are totally different studies, but my advisor has asked if I would mind collecting some data for him while I am collecting my own data. The time you participate for will be exactly the same – you will just be doing two shorter studies, rather than one long one. So I’ll tell you about my own study first, and we’ll talk about his study afterwards.”
- “So my study is investigating the factors that affect trait recall. There is some evidence that when traits are self-relevant, they are easier to remember. So this is what I’m investigating in my study. You’ll get a list of words that could apply to people/to the Scots or the English, and you’ll be asked to recall them at the end of the study. You’ll also be given a short paragraph about a study

that was conducted in the department a while ago, that investigated trait relevance, and you'll be asked to recall some details about this too. Ok?"

(PARTICIPANT READS INFORMATION FORM, SIGNS CONSENT FORM
AND COMPLETES 'STUDY 1', WHICH CONTAINS THE
MANIPULATIONS.)

- "Great. So I'll tell you about my advisor's study now. He is interested in people's behaviour during problem solving tasks, especially how people work together to solve problems. So next-door is another participant, who is completing this study at the same time as you. Both of you will listen to a short crime mystery being read out on tape, and then will get some recall questions to answer. If you are able to answer them, you should have a clearer idea of the solution to the mystery. You'll get 2 minutes to answer the questions."
- "So that you and your partner can learn a bit more about each other, you will each fill out brief information sheets about yourselves, which will be swapped, and I'll give you a moment to read though your partner's information."
- "You and your partner will then be given special consultation forms. In these forms, you can request as much or as little help on the recall questions from each other as you wish. These forms will then be swapped between partners, so that the other partner can provide the help requested from them if they wish. Only your partner will see the form- nobody else."

- “After the problem-solving task is over, you’ll be able to evaluate how the task went, using a questionnaire. Lastly, you and your partner will meet to compare your experiences of the task in a face-to-face interaction task.”

(PARTICIPANT READS INFORMATION FORM AND SIGNS CONSENT
FORM FOR ‘STUDY 2’.)

- Ok, so if you could now fill out this information form about yourself, and then I’ll go next door and swap it with your partner.”

(PARTICIPANT FILLS OUT INFORMATION SHEET. EXPERIMENTER
PUTS IT IN A PAPER FOLDER, LEAVES THE ROOM AND OSTENSIBLY
COMES BACK WITH THE PARTNER’S FORM IN THE FOLDER, WHICH
WAS IN THERE ALL ALONG.)

- “Ok- so here is your partner’s information sheet. I’ll give you a minute to read it.”

(PARTICIPANT READS PARTNERS’ INFORMATION SHEET.)

- “Right, I’ll now let you hear the mystery.”

(EXPERIMENTER PLAYS MYSTERY.)

XLVII

- “Ok- now you have 2 minutes to try to answer the questions.”

(PARTICIPANT ATTEMPTS TASK FOR TWO MINUTES.)

- “Ok- that’s the two minutes up. So now I’m going to give you the consultation form, which I’ll take through to your partner after you’re finished. Remember that you can ask for as much or as little help from your partner as you like, just as they can ask you for as much or as little help as they like.

(PARTICIPANT COMPLETES CONSULTATION FORM.)

- “Great. Now, before I take this through to your partner, I’ll give you this evaluation form, which will ask about your experiences of the task.

(PARTICIPANT FILLS OUT EVALUATION FORM CONTAINING
ADDITIONAL ITEMS, THEN IS DEBRIEFED AND COMPENSATED.)

Materials Presented to Participants

(‘Study 1’: Interpersonal Condition Materials)

Does relevance affect trait recall?

1. Please rate the extent to which you agree or disagree that you possess the following traits by circling the relevant number. You will be asked to recall these traits later in the study.

0	1	2	3	4
Strongly Disagree	Disagree a little	Neither Disagree nor Agree	Agree a little	Strongly Agree

To what extent do **you agree that you are...**?:

a)	A freeloader	0	1	2	3	4
b)	Clumsy	0	1	2	3	4
c)	Adventurous	0	1	2	3	4
d)	A loafer	0	1	2	3	4
e)	Handout-dependent	0	1	2	3	4
f)	Friendly	0	1	2	3	4
g)	Creative	0	1	2	3	4
h)	A scrounger	0	1	2	3	4

2. Please read the following information carefully, and answer the questions that follow:

A group of social psychology researchers at the University of Dundee were interested in different types of television adverts, and the various factors that can affect how persuasive the adverts are perceived to be. To answer these questions, we made copies of some current television adverts and recruited participants to evaluate them. Participants were encouraged to discuss their feelings and opinions towards the adverts and to identify the adverts they believed to be most persuasive.

Generally, participants agreed that the most persuasive adverts were ones in which the main characters were shown to possess positive traits- particularly the traits of honesty, happiness and cleverness. One respondent explained that she “liked adverts that depicted people in a positive way – it just makes me feel so much more positive about the product.” Another interviewee agreed: “I hate adverts where people are depicted as lazy or stupid- I suppose it’s meant to be funny, but I’ve never understood that. Why would I buy something that is advertised by a stupid person?” Thus, this study produced some interesting results: it seems that the success of adverts may be less to do with the actual product that is being promoted, and more to do with how the people in the adverts are depicted.

Please answer the following recall questions:

a) What topic did we investigate?

Attitudes to crime _____

Anti-smoking campaigns _____

Advert persuasiveness _____

Ability to recall facts _____

b) Which of these was a trait that people particularly liked to see in adverts?

Laziness _____

Honesty _____

Stupidity _____

Anger _____

3. Now, please take one or two minutes to try to recall as many of the traits from the start of the questionnaire as possible:

Finally, please create an identification code:

Your initials: ____

The year in which you were born: 19__

‘Study 1’: Intergroup Condition Materials**Does relevance affect trait recall?**

1. Please rate the extent to which you agree or disagree that the English possess the following traits by circling the relevant number. You will be asked to recall these traits later in the study.

0	1	2	3	4
Strongly Disagree	Disagree a little	Neither Disagree nor Agree	Agree a little	Strongly Agree

To what extent **do you agree that the English are...?**:

a)	Freeloaders	0	1	2	3	4
b)	Clumsy	0	1	2	3	4
c)	Adventurous	0	1	2	3	4
d)	Loafers	0	1	2	3	4
e)	Handout-dependent	0	1	2	3	4
f)	Friendly	0	1	2	3	4
g)	Creative	0	1	2	3	4
h)	Scroungers	0	1	2	3	4

2. Please rate the extent to which you agree or disagree that the Scots possess the following traits by circling the relevant number. You will be asked to recall these traits later in the study.

0	1	2	3	4
Strongly Disagree	Disagree a little	Neither Disagree nor Agree	Agree a little	Strongly Agree

To what extent **do you agree that the Scots are...?**:

a)	Freeloaders	0	1	2	3	4
b)	Clumsy	0	1	2	3	4
c)	Adventurous	0	1	2	3	4
d)	Loafers	0	1	2	3	4
e)	Handout-dependent	0	1	2	3	4
f)	Friendly	0	1	2	3	4
g)	Creative	0	1	2	3	4
h)	Scroungers	0	1	2	3	4

3. Please read the following information carefully, and answer the questions that follow:

A group of social psychology researchers at the University of Dundee were interested in different types of television adverts, and the various factors that can affect how persuasive the adverts are perceived to be. To answer these questions, we made copies of some current television adverts and recruited participants to evaluate them. Participants were encouraged to discuss their feelings and opinions towards the adverts and to identify the adverts they believed to be most persuasive.

Generally, participants agreed that the most persuasive adverts were ones in which the main characters were shown to possess positive traits- particularly the traits of honesty, happiness and cleverness. One respondent explained that she “liked adverts that depicted people in a positive way – it just makes me feel so much more positive about the product.” Another interviewee agreed: “I hate adverts where people are depicted as lazy or stupid- I suppose it’s meant to be funny, but I’ve never understood that. Why would I buy something that is advertised by a stupid person?” Thus, this study produced some interesting results: it seems that the success of adverts may be less to do with the actual product that is being promoted, and more to do with how the people in the adverts are depicted.

Please answer the following recall questions:

a) What topic did we investigate?

Attitudes to crime _____

Anti-smoking campaigns _____

Advert persuasiveness _____

Ability to recall facts _____

b) Which of these was a trait that people particularly liked to see in adverts?

Laziness _____

Honesty _____

Stupidity _____

Anger _____

4. Now, please take one or two minutes to try to recall as many of the traits from the start of the questionnaire as possible:

Finally, please create an identification code:

Your initials: ____

The year in which you were born: 19__

‘Study 1’: Meta-Stereotype Salient Condition Materials**Does relevance affect trait recall?**

1. Please rate the extent to which you agree or disagree that the English believe that the Scots possess the following traits by circling the relevant number. You will be asked to recall these traits later in the study.

0	1	2	3	4
Strongly Disagree	Disagree a little	Neither Disagree nor Agree	Agree a little	Strongly Agree

To what extent do you agree that **the English think the Scots are...?**:

a)	Freeloaders	0	1	2	3	4
b)	Clumsy	0	1	2	3	4
c)	Adventurous	0	1	2	3	4
d)	Loafers	0	1	2	3	4
e)	Handout-dependent	0	1	2	3	4
f)	Friendly	0	1	2	3	4
g)	Creative	0	1	2	3	4
h)	Scroungers	0	1	2	3	4

2. Now, please rate the extent to which you yourself agree or disagree that the Scots possess the following traits by circling the relevant number. You will be asked to recall these traits later in the study.

0	1	2	3	4
Strongly Disagree	Disagree a little	Neither Disagree nor Agree	Agree a little	Strongly Agree

To what extent **do you agree that the Scots are...?**:

a)	Freeloaders	0	1	2	3	4
b)	Clumsy	0	1	2	3	4
c)	Adventurous	0	1	2	3	4
d)	Loafers	0	1	2	3	4
e)	Handout-dependent	0	1	2	3	4
f)	Friendly	0	1	2	3	4
g)	Creative	0	1	2	3	4
h)	Scroungers	0	1	2	3	4

3. Please read the following information carefully, and answer the questions that follow:

A group of social psychology researchers at the University of Dundee were interested in how the English perceive the Scots. To investigate this, we interviewed a number of English people, and asked them what kind of adjectives they tend to associate with Scottish people. The English respondents mentioned a number of positive attributes that they use to describe the Scots, including brave, patriotic and witty. However, the respondents also listed various negative traits.

The negative adjectives most commonly attributed to the Scots were self-interested, handout-dependent and scroungers. Similar ideas were apparent in our interviews. Thus, one English respondent argued that “everyone knows that the Scots are mean and penny-pinching, so perhaps it’s to do with that, but they seem incredibly willing to take from others, and very unwilling to give anything back, which leads to an attitude of ‘well, I’ll just let other people look after me’.” Another said, “You can dress it up as being cautious or whatever, but basically they are scroungers, who are happy to rely on others”. Another English respondent argued that the Scots were “amazingly self-interested” and that they had no idea about the importance of such things as “pulling their weight, or working for what they’ve got- they just go to the dependent extreme”. She continued, “Everyone knows this- they just go to the extreme and that level of reliance is just silly: Ask anyone.”

Please answer the following recall questions:

a) What did our study aim to investigate?

How the Scots see the English _____

How the Scots see themselves _____

How the English see the Scots _____

b) How did most English respondents describe the Scots?

Handout-dependent _____

Naïve _____

Wise _____

Intelligent _____

4. Now, please take one or two minutes to try to recall as many of the traits from the start of the questionnaire as possible:

Finally, please create an identification code:

Your initials: _____

The year in which you were born: 19____

'Study 2': All Conditions

(Participants filled in this form before hearing the mystery. The sections in parentheses indicate the 'partner's' responses which the participant received.)

**An investigation of problem-solving behaviour
MY INFORMATION SHEET**

**Please fill in the blanks, in order to create some
biographical information about yourself, for your
partner to read:**

My initials are _____. (TF)

**I was born in the city/town of: _____(London) and
grew up in the city/town of: _____(Manchester). I
came to study at the University of Dundee because:**

**(Some of my friends from Manchester were coming
here too).**

Text of the Mystery

(participants heard a recording of this):

“I know we should have called the police,” Eric Wembley admitted as he nursed a bump on the back of his head. “But the kidnapper said he’d kill my brother if we did. And it’s not like we couldn’t afford the ransom.”

Mark Wembley, the elder son of Simon Wembley, and the brother of Eric Wembley, had been missing since Tuesday. On Wednesday morning, a lone kidnapper telephoned the mansion and made his demands. The younger Wembley son, Eric, was to bring the money in unmarked notes in a rucksack. He was to take a specific route from the mansion, parking in a nearby car park and carrying the bag through an alley to a drop site in a local park.

The normally cheap Simon Wembley was frantic and willingly agreed to the terms. He instructed Eric to give the kidnappers the ransom. A midnight pay-off, and no police.

“I was halfway through the alley,” Eric testified, “when I heard footsteps. Before I could turn around I was hit on the head. I fell down. But it didn’t quite knock me out. I could see his back by the light of a street lamp. I never got to see his front. He was running away with the rucksack. He was a tall guy with white trainers. He was wearing blue jeans and a dark cardigan. Sorry I can’t be more specific.”

In the case’s one lucky break, a police officer came across Eric shortly after the attack. He called in the crime and a patrol car responded immediately. Two suspicious-looking characters were apprehended in the vicinity, both resembling the description that Eric had given.

“So, I was running,” Peter Bordon said angrily. He had been found two streets from the attack and started running as soon as he saw the patrol car. Peter had a string of prior convictions. “I’m on parole,” he admitted “And I was carrying a knife – for my own protection at night. That’s a violation. Are you surprised that I ran away?” The second suspect was Arnold Acker, a homeless man. “I wasn’t even wearing this sweater,” he protested as he unbuttoned his moth-eaten cardigan. “I took it out of the bins just before you guys pulled me in.”

“We didn’t find money on either one of them,” the chief of police told Simon Wembley. “And we didn’t find the rucksack. But I got a pretty good idea what happened. Don’t worry. We’ll get your son back.”

Who was the kidnapper?

'Study 2' Recall Questions: All Conditions

Remembering details is very important when trying to solve problems like this. By trying to answer the following recall questions, you should have a better idea of the solution to the mystery.

Without looking back, please answer the following questions:

1. What is the name of the person who was kidnapped?

2. For what crime had Peter Borden been arrested before this event?

3. What was the relationship between the person who was kidnapped and the person who took the money to the kidnapper?

4. What was the name of the chief of police?

5. How many men were seen in the area when the attack on Eric took place?

6. How much money did the kidnapper ask for?

7. What was the name of the park where the money was to be dropped?

8. Who was the kidnapper?

'Study 2' Help-Seeking Consultation Form: All Conditions

In this form, you may request as much or as little help from your partner as you like, just as they can request as much or as little help from you as they like.

How much assistance from your partner would you like on question....?

16. What is the name of the person who was kidnapped?

0	1	2	3
None	A small hint	A large hint	Full answer

3. For what crime had Peter Bordon been arrested before this event?

0	1	2	3
None	A small hint	A large hint	Full answer

4. What was the relationship between the person who was kidnapped and the person who took the money to the kidnappers?

0	1	2	3
None	A small hint	A large hint	Full answer

5. What was the name of the chief of police?

0	1	2	3
None	A small hint	A large hint	Full answer

6. How many men were seen in the area when the attack on Eric took place?

0	1	2	3
None	A small hint	A large hint	Full answer

7. How much money did the kidnappers ask for?

- | | | | |
|------|--------------|--------------|-------------|
| 0 | 1 | 2 | 3 |
| None | A small hint | A large hint | Full answer |

8. What was the name of the park where the money was to be dropped?

- | | | | |
|------|--------------|--------------|-------------|
| 0 | 1 | 2 | 3 |
| None | A small hint | A large hint | Full answer |

17. Who was the kidnapper?

- | | | | |
|------|--------------|--------------|-------------|
| 0 | 1 | 2 | 3 |
| None | A small hint | A large hint | Full answer |

'Study 2' Evaluation Form: All Conditions

Now, please answer some questions about your experiences, evaluations and opinions.

1. How willing are you to help your partner on the mystery questions?

0	1	2	3	4
Very	A little	Neither	A little	Very
unwilling	unwilling	unwilling	willing	willing
		nor willing		

2. a) How would you describe your mood at this moment?

0	1	2	3	4
Very	A little	Neither	A little	Very
negative	negative	negative	positive	positive
		nor		
		positive		

- b) How bad/good do you feel at this moment?

0	1	2	3	4
Very bad	A little bad	Neither	A little	Very good
		bad nor	good	
		good		

3. Please rate the extent to which you agree with the statements below by circling the relevant number.

0	1	2	3	4
Very	A little	Neither	A little fair	Very fair
unfair	unfair	unfair nor		
		fair		

How fair/unfair do you think it would be if someone described you as...?

a) Dependent	0	1	2	3	4
b) Reliable	0	1	2	3	4
c) A sponger	0	1	2	3	4
d) Tactful	0	1	2	3	4
e) Caring	0	1	2	3	4
f) A freeloader	0	1	2	3	4

4. Think about the different aspects of yourself as an individual and the groups to which you belong. Please list the first five things that come to mind when you read this sentence:

When I asked my partner for help, **I saw myself as a/an:**

5. Think about the different aspects of your partner as an individual and the groups to which your partner belongs. Please list the first five things that come to mind when you read this sentence:

When I asked my partner for help, **I saw my partner as a/an:**

6. Please think about your feelings during the part of the problem-solving task where you asked your partner for help, and then circle the relevant number for each statement:

a) When I asked my partner for help, I felt that was acting:

0	1	2	3	4
Completely as an individual	More as an individual and less as a Scot	Neither as an individual nor as a Scot	More as a Scot and less as an individual	Completely as a Scot

b) When I asked my partner for help, I felt that my partner evaluated me:

0	1	2	3	4
Completely as an individual	More as an individual and less as a Scot	Neither as an individual nor as a Scot	More as a Scot and less as an individual	Completely as a Scot

- c) When I asked my partner for help, I felt that my partner and I were interacting as members of different national groups.

0	1	2	3	4
Disagree strongly	Disagree a little	Neither disagree nor agree	Agree a little	Agree strongly

- d) When I asked my partner for help, I felt that my partner and I were interacting as unique individuals.

0	1	2	3	4
Disagree strongly	Disagree a little	Neither disagree nor agree	Agree a little	Agree strongly

7. In this study, what was the nationality of your partner?

9. During this study, to what extent did you interact with your partner as a fellow student?

0	1	2	3
Never	A little bit of the time	Some of the time	The whole time

9. During this study, to what extent did you feel that your image as a Scot was at stake?

0	1	2	3
Never	A little bit of the time	Some of the time	The whole time

10. During this study, to what extent did you feel that seeking help would damage your image as a Scot?

0	1	2	3
Never	A little bit of the time	Some of the time	The whole time

11. During the study, did you feel that, as a Scottish person, you were competing with your partner?

0	1	2	3
Never	A little bit of the time	Some of the time	The whole time

12. Please think about yourself as a Scottish person, and rate the extent to which you agree with the statements below by circling the relevant number.

0	1	2	3	4
Disagree strongly	Disagree a little	Neither disagree nor agree	Agree a little	Agree strongly

a) This national identity is very important to me.

0 1 2 3 4

b) This nationality means little to me.

0 1 2 3 4

c) I feel proud to have this nationality.

0 1 2 3 4

d) This national identity has no emotional significance for me.

0 1 2 3 4

13. Please think about yourself as a Scottish person, and rate the extent to which you agree with the statements below by circling the relevant number.

0	1	2	3	4
Disagree strongly	Disagree a little	Neither disagree nor agree	Agree a little	Agree strongly

a) Overall, my national group is considered good by others.

0 1 2 3 4

b) Most people consider my national group, on the average, to be more ineffective than other social groups.

0 1 2 3 4

c) In general, others respect my national group.

0 1 2 3 4

d) In general, others think that my national group is unworthy.

0 1 2 3 4

14. Using the scale below, please indicate the level of status experienced by both Scotland and England. Please write 'Scotland' in the square that signifies Scotland's status and 'England' in the square that signifies England's status. You may write the words in the same square, or in different squares.

Lowest Status 0	1	2	3	4	5	Highest Status 6
--------------------------------	----------	----------	----------	----------	----------	---------------------------------

15. Please rate the extent to which the English and the Scots possess these traits, using the following scale:

0	1	2	3	4
Not at all	A little	A moderate amount	Quite a lot	A lot

To what extent are the **English**..?

a) Kind	0	1	2	3	4
b) Selfish	0	1	2	3	4
c) Arrogant	0	1	2	3	4
d) Friendly	0	1	2	3	4
e) Hostile	0	1	2	3	4
f) Sociable	0	1	2	3	4

To what extent are the **Scots**..?

a) Kind	0	1	2	3	4
b) Selfish	0	1	2	3	4
c) Arrogant	0	1	2	3	4
d) Friendly	0	1	2	3	4
e) Hostile	0	1	2	3	4
f) Sociable	0	1	2	3	4

16. Please rate your agreement with the following statements by circling the relevant number:

0	1	2	3	4
Disagree strongly	Disagree a little	Neither disagree nor agree	Agree a little	Agree strongly

- a) I As a Scottish person, I believe that the English perceive the Scots as miserly.

0 1 2 3 4

- ii The perception of the Scots as miserly is unfair.

0 1 2 3 4

- b) I As a Scottish person, I believe that the English perceive the Scots as primitive.

0 1 2 3 4

- ii The perception of the Scots as primitive is unfair.

0 1 2 3 4

- c) I As a Scottish person, I believe that the English perceive the Scots as handout-dependent.

0 1 2 3 4

- ii The perception of the Scots as handout-dependent is unfair.

0 1 2 3 4

- d) I As a Scottish person, I believe that the English perceive the Scots as gloomy.

0 1 2 3 4

- ii The perception of the Scots as gloomy is unfair.

0 1 2 3 4

17. During the study, how concerned were you that the experimenter might read your help-seeking consultation form?

0	1	2	3
Not at all	A little	A moderate amount	A lot

18. The information sheet that you were given at the start of this study actually withheld some information from you about the study's true purpose. What do you think the purpose/aim of this study was? You can be a vague or as specific as you like.

19. Finally, please provide:

Your two initials: _____ The year in which you were born: _____

Your sex: _____

Appendix 5: Instructions and Materials Presented in Study 4

Verbal Instructions Given to Participants

(Phrases before slashes indicate the wording in the Ingroup condition. Phrases after slashes indicate the wording in the Outgroup condition.)

- (Greet participant.)
- So this is not actually my experiment- I am the research assistant who will give you the materials and information that you need, but the experimenters are actually a research group of girls/guys that you'll find out a bit about later. They are off campus, but they will be able to see all your data because you are inputting it all via the computer. Some of the questions that they send you will be pre-written, but they will decide which questions to send you, and in what order. They are collecting data from lots of universities, so they are using computers to make this job easier. My job is just to make sure that you understand everything and that the computer works ok.
- I'll tell you a bit about the experiment now. Basically, these men/women are interested in the differences between males' and females' reasoning styles and reasoning strategies during problem-solving tasks. There is a large amount of evidence to suggest that men and women do not differ at all in their levels of competence and ability when they attempt to solve problems, but there is evidence to suggest that the reasoning styles and strategies that men and

women use do differ. In this study, the researchers want to look at whether men and women take different ‘routes’ to get to the answer when solving problems. All strategies and styles are equally good, but it is interesting to consider whether men and women differ in these respects.

- So this study is very straightforward- you will first get a few questions asking about your thoughts about problem solving and about your gender. Then you will get a problem-solving task, which will involve you completing anagrams. Anagrams have been shown to link positively to lots of important skills and abilities, like performing well in exams, so anagrams are a good test of problem-solving ability.
- You will then get the opportunity to seek help from the researchers on any anagrams that you were unable to answer. You can ask the guys/girls for as much or as little help as you wish, and you will also do this through the computer, so that the researchers can receive any requests for assistance, and provide any help that you need.
- When you’ve finished that, you’ll get a few questions that ask about your thoughts and feelings about the study, and then you’ll be finished.

(PARTICIPANT READS INFORMATION FORM AND SIGNS CONSENT FORM. PARTICIPANT BEGINS ANSWERING ITEMS. EXPERIMENTER MAKES TELEPHONE RING WHEN PARTICIPANT BEGINS TO ANSWER AFFECT ITEMS. PARTICIPANT IS ASKED TO STOP ANSWERING ITEMS

UNTIL THE CALL IS OVER. THE COMPUTER THEN PRESENTS THE
PARTICIPANT WITH THE ANAGRAM TASK.)

- Ok- so I'm going to give you two minutes to attempt the ten anagrams. Please make sure that you understand all the information on-screen before we start. You can go back to previous anagrams by pressing the back button on the bottom left of the screen. Ready?

(PARTICIPANT ATTEMPTS ANAGRAM TASK.)

- Ok, so now that you have had 2 minutes to work on the anagrams, you have the opportunity to seek help from the girls/guys on any anagrams that you couldn't answer. You can seek as much or as little help as you like. You'll be able to request help through the computer, and then the girls/guys will be able to send back any help that you request. After that, the researchers will just ask you a few questions about your thoughts and feelings about the study, and then will be you finished. Please make sure that you understand all the information on the screen before continuing.

(PARTICIPANT COMPLETES ITEMS, AND IS THEN DEBRIEFED AND
COMPENSATED.)

Materials Presented to Participants

(These items were presented to participants via computer).

(Phrases before slashes indicate the wording used in the Ingroup Helpers condition.

Phrases after slashes indicate the wording used in the Outgroup Helpers condition.)

Thanks a lot for participating in our study. You will be using this program to enter all of your answers, so that we can see and analyze your data off-campus. If you have any questions, please ask the research assistant.

This study investigates male and female reasoning styles and reasoning strategies during problem solving tasks. Although males and females have been shown to be equally good at problem-solving tasks, there is evidence to suggest that they may use different (but equally good) strategies and styles of reasoning in order to get to the solution. This is what we are investigating in this study.

Please answer the questions that follow. Press the 'continue' button at the bottom right of the screen to move to the next page. If you make a mistake, press the 'back' button at the bottom left of the screen to return to the previous question. Try to avoid changing your mind about answers though- we want to measure your initial reactions to the questions.

Thanks a lot for participating,

Sarah, Emma and Kimberley/ Mark, Tony and Rob

(the Psychology Research team).

Since we are not here in person, we thought it would be useful for us to send you a little information about ourselves:

Sarah/Mark: graduated in 2006. He/she enjoys reading and playing football/hockey in his/her spare time.

Emma/Tony: graduated in 2003. If he/she did not do research, he/she would be a rugby player/dancer.

Kimberley/Rob: graduated in 2005. He/she is a cinema enthusiast, and particularly enjoys action and comedy films/ romance and comedy films.

We have been working together on this research project for 18 months, and are collecting data from a number of universities across the UK.

The questions that we present to you in this questionnaire will depend on your sex, so please indicate your sex by entering the relevant number.

1. Male
2. Female

Thank-you. To start, we would like to know a little bit more about you and your thoughts on both your gender and on problem-solving in general. For all questions, please enter the relevant number.

1. How often do you engage in problem-solving activities (puzzles, quizzes, etc.)?

Never	1	2	3	4	5	6	7	All the time
-------	---	---	---	---	---	---	---	-----------------

2. How important do you think it is to be good at problem-solving activities

(puzzles, quizzes, etc.)?

Not important at all	1	2	3	4	5	6	7	Extremely important
----------------------------	---	---	---	---	---	---	---	------------------------

3. To what extent do the following statements apply to you?

a) I see myself as a woman.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

b) I am happy to be a woman.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

c) I feel connected to other women.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

d) I identify with other women.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

e) 'Women' is an important group for me.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

f) Being a woman is an important part of how I see myself.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

Thanks a lot for your answers- they are very useful. The next section of the questionnaire asks about your mood. Again, please respond with the first answer that comes to mind.

4. Please rate how you feel AT THIS MOMENT

Very sad	1	2	3	4	5	6	7	Very happy
Very tense	1	2	3	4	5	6	7	Very relaxed

(While participants were answering these items, JW made her mobile phone ring, and pretended to engage in conversation with Joe.)

Telephone conversation script- Meta-Stereotype Present condition

<telephone rings>

- (To participant) – oh sorry, would you mind stopping for a second while I take this? It's the plumber working in my flat- I'll just be a second.
- Hello? (pause)
- Oh hi Joe, is everything going ok? (pause)
- Yeah, that's ok, but if you need access to that room you'll need to wait until later today, because I'll need to move my boxes of stuff out of there. (pause)
- Oh- you've already moved them? (pause)
- (Annoyed) Really, I could have done it myself (pause).
- No, they aren't that heavy at all (pause).
- Seriously, I could have managed them fine (pause).
- (Sigh) Ok- it doesn't matter now, because you've done it anyway (pause).
- Bye.

<hang up phone>

- (To participant)- Sorry about that- my plumber is such a typical man- he thinks that women are incapable of doing anything on their own! Do you know what I mean?

Telephone conversation script- Meta-Stereotype Absent condition

<telephone rings>

- (To participant) – oh sorry, would you mind stopping for a second while I take this? It's the plumber working in my flat- I'll just be a second.
- Hello? (pause)
- Oh hi Joe, is everything going ok? (pause)
- Yeah, that's ok, but if you need access to that room you'll need to wait until later today, because I'll need to move my boxes of stuff out of there. (pause)
- Oh- you've already moved them? (pause)
- (Annoyed) I didn't realise that you were in such a hurry (pause).
- Yes, but you could have just waited a bit longer and I would have done it (pause).
- (Sigh) Ok- it doesn't matter now, because you've done it anyway (pause).
- Bye.

<hang up phone>

- (To participant)- Sorry about that- my plumber is the most impatient person in the world- I've never met anybody like him before! Do you know what I mean?

Rest of Items Presented to Participants

(Participants in all conditions were then asked to continue answering items via the computer. These were presented on-screen as follows. Again, phrases before slashes indicate the wording used in the Ingroup Helpers condition. Phrases after slashes indicate the wording used in the Outgroup Helpers condition).

We are now going to give you the problem-solving task.

You will have two minutes to attempt the ten anagrams written on the sheet of paper beside you.

You may use pen and paper to help you, but please input your final answers here.

Please type 'xxx' for any anagrams that you cannot answer.

You may return to previous anagrams to change your answers, using the button at the bottom left of the screen.

Please tell the research assistant when you are ready to start, and they will time you.

1. BKCLA

2. LSNCPLEOKEG

3. EGTGIALHINN

4. EHNOY

5. NCOIRANTA

6. SESTAODRAKB

7. PPPUY

8. ONZICUMRI

9. IRBESRESARP

10. NRSATTUREA

STOP- You have reached the end of the anagram puzzle. Please wait until the research assistant tells you what to do next. (JW explained the help-seeking portion of the study).

You will now be able to fill out a help request form, indicating whether you would like to receive any help from the three of us on any of the anagrams. We will be able to send back any assistance that you require.

Remember that you can ask for as much or as little assistance as you like.

Thanks,

Sarah, Emma and Kimberley/ Mark, Tony and Rob.

1. BKCLA

0	1	2	3
None	A small hint	A large hint	Full answer

2. LSNCPLEOKEG

0	1	2	3
None	A small hint	A large hint	Full answer

3. EGTGIALHINN

0	1	2	3
None	A small hint	A large hint	Full answer

4. EHNOY

0	1	2	3
None	A small hint	A large hint	Full answer

5. NCOIRANTA

0	1	2	3
None	A small hint	A large hint	Full answer

6. SESTAODRAKB

0	1	2	3
None	A small hint	A large hint	Full answer

7. PPPUY

0	1	2	3
None	A small hint	A large hint	Full answer

8. ONZICUMRI

0	1	2	3
None	A small hint	A large hint	Full answer

9. IRBESRESARP

0	1	2	3
None	A small hint	A large hint	Full answer

10. NRSATTUREA

0	1	2	3
None	A small hint	A large hint	Full answer

Thank-you for your answers. The problem-solving task is now complete.

Whilst we are processing your requests for help and getting ready to send back any assistance that you require, please answer some questions about your thoughts and feelings during the experiment.

1. How would you describe your feelings at this moment? Please circle the relevant number:

a)

Very bad	1	2	3	4	5	6	7	Very good
----------	---	---	---	---	---	---	---	-----------

b)

Very negative	1	2	3	4	5	6	7	Very positive
---------------	---	---	---	---	---	---	---	---------------

2. Please think about your feelings towards us (the researchers), and answer the questions that follow. Please answer honestly.

a) How similar are we to you?

Not at all similar	1	2	3	4	5	6	7	Very similar
--------------------	---	---	---	---	---	---	---	--------------

b) How likely do you think it is that you would become good friends with us, if you met us?

Not at all likely	1	2	3	4	5	6	7	Very likely
-------------------	---	---	---	---	---	---	---	-------------

c) How close do you feel to us?

Not at	1	2	3	4	5	6	7	Very
all								close
close								

d) How similar is the research assistant to you (i.e. – the person who brought you to the laboratory)?

Not at	1	2	3	4	5	6	7	Very
all								similar
similar								

3. Please think about your feelings during the part of the anagram task where you asked us for help, and then circle the relevant number for each statement:

a) When I asked for help, I felt that I was acting:

Completely	1	2	3	4	5	6	7	Completely
as an								as a
individual								woman

b) When I asked for help, I felt that I would be evaluated:

Completely	1	2	3	4	5	6	7	Completely
as an								as a
individual								woman

c) When you asked us for help, to what extent did you feel that you were interacting with us on the basis of gender?

Not at	1	2	3	4	5	6	7	Completely
all								

d) When you asked us for help, to what extent did you feel that you were interacting with us as a unique individual?

Not at	1	2	3	4	5	6	7	Completely
all								

9. Where do you expect the average overall performance of female University students in the UK to be, as compared to male University students in the UK? Please circle the relevant statement:

20%	15%	10%	5%	Same as	5%	10%	15%	20%
<u>worse</u>	<u>worse</u>	<u>worse</u>	<u>worse</u>	males	<u>better</u>	<u>better</u>	<u>better</u>	<u>better</u>
than	than	than	than		than	than	than	than
males	males	males	males		males	males	males	males

10. In our society, different groups possess different levels of status.
Please indicate the relative status levels of women and men by circling the statement that best signifies women's status.

20%	15%	10%	5%	Same as	5%	10%	15%	20%
<u>lower</u>	<u>lower</u>	<u>lower</u>	<u>lower</u>	males	<u>higher</u>	<u>higher</u>	<u>higher</u>	<u>higher</u>
than	than	than	than		than	than	than	than
males	males	males	males		males	males	males	males

11. Please read the statements that follow, and for each one please indicate:

- a. The extent to which you agree that men believe the statement applies to women like you.
b. The extent to which it would be fair/unfair if men believed that the statement applied to women like you.

- a) "Women often have to depend on men for help"

	i)	To what extent do you agree that <u>men believe that this statement applies to women like you?</u>						
Not at all	1	2	3	4	5	6	7	Very much

	ii)	To what extent <u>would it be fair/unfair if men believed that this statement applied to women like you?</u>						
Very unfair	1	2	3	4	5	6	7	Very fair

- b) "Women's most distinguishing trait is their neediness"

	i)	To what extent do you agree that <u>men believe that this statement applies to women like you?</u>						
Not at all	1	2	3	4	5	6	7	Very much

	ii)	To what extent <u>would it be fair/unfair if men believed that this statement applied to women like you?</u>						
Very unfair	1	2	3	4	5	6	7	Very fair

c) “Women seem to struggle to do anything without men’s help”

	i)	To what extent do you agree that <u>men believe that this statement applies to women like you?</u>						
Not at all	1	2	3	4	5	6	7	Very much

	ii)	To what extent <u>would it be fair/unfair if men believed that this statement applied to women like you?</u>						
Very unfair	1	2	3	4	5	6	7	Very fair

d) “It is common for women to have to rely on men to get things done”

	i)	To what extent do you agree that <u>men believe that this statement applies to women like you?</u>						
Not at all	1	2	3	4	5	6	7	Very much

	ii)	To what extent <u>would it be fair/unfair if men believed that this statement applied to women like you?</u>						
Very unfair	1	2	3	4	5	6	7	Very fair

12. Please think about yourself as a woman, and rate the extent to which you agree with the statements AT THIS MOMENT:

a) I am worried about whether women (as a group) are regarded as a success or failure.

Disagree strongly	1	2	3	4	5	6	7	Agree strongly
-------------------	---	---	---	---	---	---	---	----------------

b) I feel self-conscious about being a woman.

Disagree strongly	1	2	3	4	5	6	7	Agree strongly
-------------------	---	---	---	---	---	---	---	----------------

c) I feel displeased with being a woman.

Disagree strongly	1	2	3	4	5	6	7	Agree strongly
-------------------	---	---	---	---	---	---	---	----------------

d) I am worried about what other people think of women (as a group).

Disagree 1 2 3 4 5 6 7 Agree
strongly strongly

e) I feel that my women (as a group) are inferior to others at this moment.

Disagree 1 2 3 4 5 6 7 Agree
strongly strongly

f) I feel concerned about the impression that women (as a group) are making.

Disagree 1 2 3 4 5 6 7 Agree
strongly strongly

g) I am worried about women (as a group) looking foolish.

Disagree 1 2 3 4 5 6 7 Agree
strongly strongly

13. Please rate your agreement with the following statements by circling the relevant number:

a) Discrimination against women is no longer a problem in Britain.

Disagree 1 2 3 4 5 6 7 Agree
strongly strongly

b) Women often miss out on good jobs due to sexual discrimination.

Disagree 1 2 3 4 5 6 7 Agree
strongly strongly

c) It is rare to see women treated in a sexist manner on television.

Disagree 1 2 3 4 5 6 7 Agree
strongly strongly

d) On average, people in our society treat husbands and wives equally.

Disagree 1 2 3 4 5 6 7 Agree
strongly strongly

e) Society has reached the point where women and men have equal opportunities for achievement.

Disagree 1 2 3 4 5 6 7 Agree
strongly strongly

f) It is easy to understand the anger of women's groups in Britain.

Disagree 1 2 3 4 5 6 7 Agree
strongly strongly

g) It is easy to understand why women's groups are still concerned about societal limitations of women's opportunities.

Disagree strongly 1 2 3 4 5 6 7 Agree strongly

h) Over the past few years, the government and news media have been showing more concern about the treatment of women than is warranted by women's actual experiences.

Disagree strongly 1 2 3 4 5 6 7 Agree strongly

14. Without checking or looking back, can you remember the gender/s of the research assistants who were potential sources of help for you in the anagram task?

All female _____
 All male _____
 Some male and some female _____
 Don't know _____

15 a) There are lots of different types of women. Please look at the list of types of women below, and tick the *one* that is the best description of you:

Homemaker _____
 Professional woman _____
 Feminist _____
 Athletic woman _____
 If you feel another type is more appropriate, please specify: _____

b) Now, using the same list, please rate the experimenter (the woman who gave you the materials to complete this study), using the same scale. Which *one* type describes her best?

Homemaker _____
 Professional woman _____
 Feminist _____
 Athletic woman _____
 If you feel another type is more appropriate, please specify: _____

(Participants in the Ingroup Helpers condition also completed this item with reference to the female researchers- i.e., the potential helpers.)

16. What do you think the purpose/aim of this experiment was? You can be as vague or as specific as you like.

17. Finally, please create a unique identification code for yourself by filling in:

The first initial of your first name: _____
The first initial of your last name: _____
The last 2 digits of the year in which you were born: 19 _____

18. Do you remember completing another study in the past year where you were asked to seek help from people on a task? Yes: ____ No: ____ Don't know: ____

The study is now completed. Many thanks for your participation.

Please tell the research assistant that you have finished.

Appendix 6- Instructions and Materials Presented in Study 5

Verbal Instructions Given to Participants

(Phrases before slashes indicate the wording in the Ingroup condition. Phrases after slashes indicate the wording in the Outgroup condition.)

- (Greet participant.)
- So you are actually going to participate in two short studies today, rather than one long one. The first study is my own (the one that you signed up for). I'm a PhD student here at Dundee University, and I've been doing some research here and at University College Edinburgh. For this study, I'm simply recruiting students from University College Edinburgh and Dundee University, and getting them to tell me what they think about their respective universities.
- The second study is actually being run by some Dundee University/University College Edinburgh 4th year dissertation students, who sent me an email asking if I could try to find some participants for their study, as they are struggling to get enough people. I haven't actually met them, but they sounded enthusiastic, so I said I would help them out.

- So I'll tell you about my study first. As I say, it's very straightforward- I'm just looking at what University College Edinburgh students and Dundee students think about their universities. So you'll just be asked to complete a very straightforward questionnaire, and all the information that you need will be in there. Ok?

(PARTICIPANT READS INFORMATIONS FORM, SIGNS CONSERNT
FORM AND COMPLETES 'STUDY 1'.)

- Great- so now I'm going to tell you a little bit about the study being run by the Dundee University /University College Edinburgh 4th Year dissertation students. I'll get you to move to the computer for this study.
- Although they are not on campus, the researchers are going to be able to see and analyse your data when you type, and they will be able to respond back. Don't worry about the webcam by the way- it was used for another study where the researchers had to see the participants as well as being able to respond to them. It's not switched on for this study.
- This is another simple study- they are just looking at the strategies that people use to help them solve anagrams. They are going to give you 10 anagrams to attempt in a minute and a half, and after that you'll be able to seek as much or as little help from the researchers as you wish on any of the anagrams. They will also give you a few questions asking about the types of strategies that you used during the anagram task, and then the study will be complete.

(PARTICIPANT READS INFORMATION FORM, SIGNS CONSENT FORM
AND COMPLETES STUDY 2, INCLUDING THE ANAGRAM TASK.
PARTICIPANT IS THEN DEBRIEFED AND COMPENSATED.)

Materials Presented to Participants

‘Study 1’ Materials: Both Conditions

What are your opinions about your University?

QUESTIONNAIRE

NOTE- This version of the questionnaire is for

DUNDEE UNIVERSITY STUDENTS. If you are a University College

Edinburgh Student, please inform the research assistant.



University College
Edinburgh



The first few questions are designed to learn a bit more about you:

1a) Which year are you in at Dundee University? _____

b) What subject/s do you study? _____

c) How old are you? _____

2. Please think about yourself as a Dundee University student, and rate your agreement with these statements:

a) I see myself as a Dundee University student.
 Not at 1 2 3 4 5 6 7 Very
 all much

b) I am happy to be a Dundee University student.
 Not at 1 2 3 4 5 6 7 Very
 all much

c) I feel connected to other Dundee University students.
 Not at 1 2 3 4 5 6 7 Very
 all much

d) I identify with other Dundee University students.
 Not at 1 2 3 4 5 6 7 Very
 all much

e) 'Dundee University student' is an important group for me.
 Not at 1 2 3 4 5 6 7 Very
 all much

f) Being a Dundee University student is an important part of how I see myself.
 Not at 1 2 3 4 5 6 7 Very
 all much

Please turn over >

3. We are comparing the views of University College Edinburgh students and Dundee University students regarding their opinions towards their universities. However, we are also interested in their opinions towards each other. In previous studies, the two groups were found to have strong feelings about each other, and we wish to investigate this further.

We would like you to think about University College Edinburgh students' opinions of Dundee University students.

Please rate the extent to which University College Edinburgh students believe that Dundee University students possess each of the following traits.

If you are unsure of your answer for any of the traits, simply estimate your response.

To what extent do University College Edinburgh students perceive Dundee University students as...?

a. Lazy	Not at all	1	2	3	4	5	6	7	Very much
b. Hard-working	Not at all	1	2	3	4	5	6	7	Very much
c. Aggressive	Not at all	1	2	3	4	5	6	7	Very much
d. Fun-loving	Not at all	1	2	3	4	5	6	7	Very much
e. Polite	Not at all	1	2	3	4	5	6	7	Very much
f. Selfish	Not at all	1	2	3	4	5	6	7	Very much
g. Intelligent	Not at all	1	2	3	4	5	6	7	Very much
h. Inferior	Not at all	1	2	3	4	5	6	7	Very much

Please turn over >

4a) Where do you expect the average overall academic performance of Dundee University students to be, compared to University College Edinburgh students?

Please circle the relevant statement:

Dundee University students' academic performance is...

20%	15%	10%	5%	Same as	5%	10%	15%	20%
<u>worse</u>	<u>worse</u>	<u>worse</u>	<u>worse</u>	UCE	<u>better</u>	<u>better</u>	<u>better</u>	<u>better</u>
than	than	than	than		than	than	than	than
UCE	UCE	UCE	UCE		UCE	UCE	UCE	UCE

b) In our society, different groups possess different levels of status.

Please indicate the relative status levels of Dundee University students and University College Edinburgh students by circling the statement that best describes Dundee University students' status:

Dundee University students' status is...

20%	15%	10%	5%	Same as	5%	10%	15%	20%
<u>lower</u>	<u>lower</u>	<u>lower</u>	<u>lower</u>	UCE	<u>higher</u>	<u>higher</u>	<u>higher</u>	<u>higher</u>
than	than	than	than		than	than	than	than
UCE	UCE	UCE	UCE		UCE	UCE	UCE	UCE

Please turn over >

- 5. How would you describe your fellow students (i.e., those who attend Dundee University?)**

Please write down your thoughts below. You can write in sentences or bullet-points, and be as vague or as specific as you wish.

-
- 6. How do you feel about Dundee University? Do you enjoy attending? Why/why not?**

Please write down your thoughts below. You can write in sentences or bullet-points, and be as vague or as specific as you wish.

- 7. Finally, please create an identification code for yourself by filling in:**

Your initials: ____

The year in which you were born: 19____

You have now finished the questionnaire- many thanks for your help.

‘Study 2’ Materials: Both Conditions.

(These items were presented to participants via computer. Phrases before slashes indicate the wording used in the Ingroup Helpers condition. Phrases after slashes indicate the wording used in the Outgroup Helpers condition).

A study of anagram-solving strategies

Thanks a lot for participating in our study. You will be using this computer to enter all of your answers, so that we can see and analyze your data. If you have any questions, please ask the Dundee University researcher in the room with you.

This study investigates the different strategies that people use to solve anagrams. Please answer the questions that follow. Press the ‘Continue’ button at the bottom right of the screen to move to the next page. If you make a mistake, press the 'Back' button at the bottom left of the screen to return to the previous question. Try to avoid changing your mind about answers though- we want to measure your initial reactions to the questions.

Thanks a lot for participating,

Dundee University 4th Year Dissertation Students/University College Edinburgh
4th Year Dissertation Students.



First, we would like to ask you a few questions about yourself. Please enter the relevant answer/number for each question.

1. Which University are you studying at? Your response will affect which questions we give you to answer.

2. Thank you. What course are you taking? If you study more than one subject, please list all of them, separated by commas.

Thanks a lot for your answers- they are very useful. We are now going to give you the anagram task.

You will have one-and-a-half minutes to attempt the ten anagrams written on the sheet of paper beside you.

You may use pen and paper to help you, but please input your final answers here.

Please type 'xxx' for any anagrams that you cannot answer.

You may return to previous anagrams to change your answers, using the button at the bottom left of the screen.

Please tell the researcher with you when you are ready to start, and they will time you.

1. BKCLA

2. LSNCPLEOKEG

3. EGTGIALHINN

4. EHNOY

5. NCOIRANTA

6. SESTAODRAKB

7. PPPUY

8. ONZICUMRI

9. IRBESRESARP

10. NRSATTUREA

STOP- You have reached the end of the anagram task. Please wait until the researcher with you tells you what to do next (JW explained the help-seeking portion of the study).

One of the strategies that some people may use to help them solve anagrams is to ask for more information. You will now be able to fill out an assistance request form, indicating whether you would like to receive any assistance from us on any of the anagrams. We will be able to send back any assistance that you require.

Remember that you can ask for as much or as little assistance as you like.

Thanks,

Dundee University 4th Year Dissertation Students/University College Edinburgh
4th Year Dissertation Students.

1. BKCLA

0	1	2	3
None	A small hint	A large hint	Full answer

2. LSNCPLEOKEG

0	1	2	3
None	A small hint	A large hint	Full answer

3. EGTGIALHINN

0	1	2	3
None	A small hint	A large hint	Full answer

4. EHNOY

0	1	2	3
None	A small hint	A large hint	Full answer

5. NCOIRANTA

0	1	2	3
None	A small hint	A large hint	Full answer

6. SESTAODRAKB

0	1	2	3
None	A small hint	A large hint	Full answer

7. PPPUY

0	1	2	3
None	A small hint	A large hint	Full answer

8. ONZICUMRI

0	1	2	3
None	A small hint	A large hint	Full answer

9. IRBESRESARP

0	1	2	3
None	A small hint	A large hint	Full answer

10. NRSATTUREA

0	1	2	3
None	A small hint	A large hint	Full answer

Thank-you for your answers. The problem-solving task is now complete.

Whilst we are processing your requests for help and getting ready to send back any assistance that you require, please answer the following questions.

1. Were you aware of using any specific strategies during the anagram-solving task? If so, please describe them here. If you did not use any specific strategies, please just type 'none'.

2. How would you describe your feelings at this moment? Please enter the relevant number:

a)

Very bad	1	2	3	4	5	6	7	Very good
----------	---	---	---	---	---	---	---	-----------

b)

Very negative	1	2	3	4	5	6	7	Very positive
---------------	---	---	---	---	---	---	---	---------------

3. Please think about your feelings towards us (the Dundee University dissertation students/University College dissertation students), and answer the questions that follow. Please answer honestly.

- a) **How similar are we to you?**
 Not at all similar 1 2 3 4 5 6 7 Very similar
- b) **How likely do you think it is that you would become good friends with us, if you met us?**
 Not at all likely 1 2 3 4 5 6 7 Very likely
- c) **How much would you like to socialise with us, if you met us (e.g., going to the pub or the cinema)?**
 Not at all 1 2 3 4 5 6 7 Very much
- d) **How much do you think you would like us, if you met us?**
 Not at all 1 2 3 4 5 6 7 Very much
- e) **How similar is the Dundee University student research assistant to you (i.e. the person who brought you to the laboratory)?**
 Not at all similar 1 2 3 4 5 6 7 Very similar

4. Please think about your feelings during the part of the anagram task where you asked us for assistance, and then circle the relevant number for each statement:

- a) **When I asked for assistance, I felt that I was acting:**
 Completely as an individual 1 2 3 4 5 6 7 Completely as a Dundee University student
- b) **When I asked for assistance, I felt that I would be evaluated:**
 Completely as an individual 1 2 3 4 5 6 7 Completely as a Dundee University student

- c) When you asked us for assistance, to what extent did you feel that you were a representative of the group 'Dundee University students' interacting with fellow members of the group 'Dundee University students'/a representative of the group 'Dundee University students' interacting with representatives of the group 'University College students'?

Not at all 1 2 3 4 5 6 7 Completely

- d) When you asked us for assistance, to what extent did you feel that you were a unique individual interacting with other unique individuals?

Not at all 1 2 3 4 5 6 7 Completely

5. Please rate your agreement with the following statements:

- a) I care about what other people think about Dundee University students.

Not at all 1 2 3 4 5 6 7 Very much

- b) If I thought the image of Dundee University students was under threat, I would be motivated to protect it.

Not at all 1 2 3 4 5 6 7 Very much

- c) I'm willing to help to ensure that Dundee University students have a good reputation in the eyes of others.

Not at all 1 2 3 4 5 6 7 Very much

- d) It is important that Dundee University students have a good reputation.

Not at all 1 2 3 4 5 6 7 Very much

- e) During this study, to what extent did you feel that seeking assistance would DAMAGE Dundee University students' reputations?

Not at all 1 2 3 4 5 6 7 Very much

f) During this study, to what extent did you feel that seeking assistance would IMPROVE Dundee University students' reputations?

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

6. **Please think about yourself as a Dundee University student, and rate the extent to which you agree with the statements below by circling the relevant number:**

a) **I see myself as a Dundee University student.**

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

b) **I am happy to be a Dundee University student.**

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

c) **I feel connected to other Dundee University students.**

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

d) **I identify with other Dundee University students.**

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

e) **'Dundee University student' is an important group for me.**

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

f) **Being a Dundee University student is an important part of how I see myself.**

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

7. Without checking or looking back, can you remember what University we are from?

St. Andrews University	_____
Dundee University	_____
University College Edinburgh	_____
Don't know	_____

8. What do you think the purpose/aim of this experiment was? You can be as vague or as specific as you like.

9. Finally, please fill in:

The first initial of your first name: _____
The first initial of your last name: _____
The year in which you were born: 19_____

The study is now completed. Many thanks for your participation.
Please tell the research assistant that you have finished.

Appendix 7-Materials Presented in Study 6 (Both Conditions)

How are Dundee University students perceived by students from other universities?

QUESTIONNAIRE

The first few questions are designed to learn a bit more about you.

1a) Which year are you in at Dundee University? _____

b) What subject/s do you study? _____

2. Please think about yourself as a Dundee University student, and rate your agreement with these statements:

a) Being a Dundee University student is very important to me.

Disagree 1 2 3 4 5 6 7 Agree

b) Being a Dundee University student means little to me.

Disagree 1 2 3 4 5 6 7 Agree

c) I feel proud to be a Dundee University student.

Disagree 1 2 3 4 5 6 7 Agree

d) Being a Dundee University student has no emotional significance for me.

Disagree 1 2 3 4 5 6 7 Agree

Please turn over >

On the following four pages, you will find responses from four different University College Edinburgh students. They were given a large questionnaire to complete, which aimed to investigate University College Edinburgh students' opinions of Dundee University students. You have been given their responses from one section of this questionnaire.

Please read the responses carefully, and answer the questions that follow.

Please turn over >

Help-Seeking Meta-Stereotype Condition

(These were hand-written, and each was on a separate page)

Respondent 1: I guess I would say that my friends and I generally have this view that although Dundee students are really friendly, they don't tend to get as involved, academically speaking, as students from other Universities do, for whatever reason.

Respondent 2: I get the feeling that Dundee students are generally pretty bad at asking for help, which surprises me, as students really should do that. It's really bad for the whole University if students can't be bothered to ask for advice- you can only learn if you are willing to ask questions when you are given things you don't understand!

Respondent 3: I have heard that Dundee students have a great students' union and have a really good time. But I do know that some people in my class think that Dundee students are maybe not that dynamic.

Respondent 4: I once came over to a seminar at Dundee University, and none of us understood the topic at all. The Dundee University students sat in silence for ages, rather than admit that they were stuck. They left it up to me to ask the tutor to explain things more clearly. I thought that was a pretty selfish for the Dundee University students to do, as it disadvantaged everyone at the seminar- why are Dundee University students so unwilling to put their hands up?

Charity Meta-Stereotype Condition

(These were hand-written, and each was on a separate page)

Respondent 1: I guess I would say that my friends and I generally have this view that although Dundee students are really friendly, they don't tend to get as involved in charity events as students from other universities do, for whatever reason.

Respondent 2: I get the feeling that Dundee students are generally pretty tight-fisted, and not that generous with their money and time. I know they say that they are busy and don't have a lot of spare cash, but things will only improve if people are willing to help those less fortunate than themselves!

Respondent 3: I have heard that Dundee students have a great students' union and have a really good time. But I do know that some people in my class think that Dundee students are maybe not that dynamic.

Respondent 4: I visited some friends who go to Dundee University recently, and it happened to be Rag Week, where students are meant to help raise funds for charity. I was really struck by the lack of interest that the students showed for the event- nobody was really getting involved at all. I thought that was a pretty selfish thing for the Dundee University students to do, as it disadvantages everyone- why are Dundee University students so unwilling to help those in need?

Evaluation: Both Conditions

Please answer the following questions:

1. Overall, how fair/unfair do you find these comments?

Very unfair	1	2	3	4	5	6	7	Very fair
----------------	---	---	---	---	---	---	---	--------------

2. Overall, how legitimate/illegitimate do you find these comments?

Very illegitimate	1	2	3	4	5	6	7	Very legitimate
----------------------	---	---	---	---	---	---	---	--------------------

3. Overall, how insulting do you find these comments?

Not at all insulting	1	2	3	4	5	6	7	Very insulting
----------------------------	---	---	---	---	---	---	---	-------------------

4. Overall, how annoying do you find these comments?

Not at all annoying	1	2	3	4	5	6	7	Very annoying
------------------------	---	---	---	---	---	---	---	------------------

5. Overall, how hurtful do you find these comments?

Not at all hurtful	1	2	3	4	5	6	7	Very hurtful
--------------------------	---	---	---	---	---	---	---	-----------------

6. Overall, how judgemental do you find the University College Edinburgh students who made these comments?

Not at all judgemental	1	2	3	4	5	6	7	Very judgemental
---------------------------	---	---	---	---	---	---	---	---------------------

7. Overall, to what extent do these comments damage the reputation of Dundee University students?

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

8. Overall, how motivated would you be to disprove these comments?

Not at all motivated	1	2	3	4	5	6	7	Very motivated
-------------------------	---	---	---	---	---	---	---	-------------------

Please turn over >

9. How effective would each of these methods be for disproving the comments?

- i) **Donating some money to a local charity set up to help Dundee University students who experience difficulties during their studies.**
- | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|----------------|
| Not at all effective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very effective |
|----------------------|---|---|---|---|---|---|---|----------------|
- ii) **Emailing lecturers straight away when you do not understand something.**
- | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|----------------|
| Not at all effective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very effective |
|----------------------|---|---|---|---|---|---|---|----------------|
- iii) **Donating some money to a national charity set up to help students across the UK who experience difficulties during their studies.**
- | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|----------------|
| Not at all effective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very effective |
|----------------------|---|---|---|---|---|---|---|----------------|
- iv) **Asking questions at public presentations held at Dundee University, to make sure that you have understood the speaker properly.**
- | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|----------------|
| Not at all effective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very effective |
|----------------------|---|---|---|---|---|---|---|----------------|
- v) **Avoiding seeking help, even when you really need it.**
- | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|----------------|
| Not at all effective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very effective |
|----------------------|---|---|---|---|---|---|---|----------------|
- iv) **Avoiding giving any money to charity.**
- | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|----------------|
| Not at all effective | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very effective |
|----------------------|---|---|---|---|---|---|---|----------------|

10. Please think about your feelings towards the University College Edinburgh students who made these comments, and answer the questions that follow.

- a) **How similar are you to the University College Edinburgh students who made the comments?**
- | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|--------------|
| Not at all similar | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very similar |
|--------------------|---|---|---|---|---|---|---|--------------|
- b) **How likely do you think it is that you would become good friends with the University College Edinburgh students who made the comments, if you met them?**
- | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|-------------|
| Not at all likely | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very likely |
|-------------------|---|---|---|---|---|---|---|-------------|
- c) **How much do you think you would like the University College Edinburgh students who made the comments, if you met them?**
- | | | | | | | | | |
|------------|---|---|---|---|---|---|---|-----------|
| Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very much |
|------------|---|---|---|---|---|---|---|-----------|

Please turn over >

11. How much do you agree with the following statements?

- a) University College Edinburgh students generally think that Dundee University students are reluctant to seek help.**

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

- b) University College Edinburgh students generally think that Dundee University students are reluctant to help others.**

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

- c) University College Edinburgh students generally think that Dundee University students are fun-loving.**

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

Please turn over >

12. What do you think the purpose/aim of this study was? You can be as vague or specific as you like.

Finally: **Your initials:** ____ **Your date of birth: 19** ____

Many thanks for completing this questionnaire

Appendix 8- Instructions and Materials Presented in Study 7

Verbal Instructions Given to Participants

- (Greet participant.)
- So you are actually going to participate in two short studies today, rather than one long one. The researchers at Dundee University are collaborating with researchers at University College Edinburgh at the moment, and we've decided to increase our numbers of participants by including participants from both Universities in our studies. So you'll complete my study first of all, and then you'll complete the study run by University College Edinburgh students. Participants at University College will participate in both studies too, so we should get a lot more data using this method.
- So I'll tell you about my study first. There's a lot of research that investigates how universities try to promote themselves and to encourage students to study with them, especially with the recession at the moment. But I'm interested in how the students who attend the universities are actually perceived by other people. I'm a PhD. Student here at Dundee University, so I am investigating how students from other Universities perceive Dundee University students, and how Dundee University students react to these perceptions. Because we are collaborating with University College Edinburgh at the moment, I've decided to investigate how students from University College perceive Dundee University students.
- I'm going to give you some of the responses from a questionnaire that I ran last month at University College Edinburgh. This was a large questionnaire,

but I'm just going to give you the responses from the section where they were asked to write about what they think of Dundee University students. I'm then going to give you a few questions about your thoughts and feelings related to what you have just read. That's all there is to it-it's a really simple study.

(PARTICIPANT READS INFORMATION SHEET, SIGNS CONSENT FORM
AND COMPLETES 'STUDY 1', WHICH CONTAINS THE
MANIPULATIONS.)

- Great- so now I'm going to tell you a little bit about the study being run by the postgraduate students at University College Edinburgh. I'll get you to move to the computer for this study.
- Although they are not on the Dundee University campus, the researchers are going to be able to see and analyse your data when you type, and they will be able to respond back. Don't worry about the webcam by the way- it was used for another study where the researchers had to see the participants as well as being able to respond to them. It's not switched on for this study.
- This is another simple study- they are just looking at the strategies that people use to help them solve anagrams. They are going to give you 10 anagrams to attempt in a minute and a half. They will also give you a few questions asking about the types of strategies that you used during the anagram task, and then the study will be complete.

(PARTICIPANT READS INFORMATION SHEET, SIGNS CONSENT FORM
AND COMPLETES 'STUDY 2', INCLUDING THE ANAGRAM TASK.)

- Great. So one of the potential strategies that some people might use to solve anagrams is to ask other people for help. So for the next part of the study, you can ask the University College Edinburgh students for as much or as little help on each of the anagrams as you like. They'll send you back any help that you ask for. You'll get another chance to look at the anagrams later on. Ok?

(PARTICIPANT COMPLETES REST OF STUDY AND IS THEN
DEBRIEFED AND COMPENSATED.)

Materials Presented to Participants

‘Study 1’: Both Conditions

“How are Dundee University students perceived by students from other universities?”

QUESTIONNAIRE

The first few questions are designed to learn a bit more about you:

1a) Which year are you in at Dundee University? _____

b) What subject/s do you study? _____

2. Please think about yourself as a Dundee University student, and rate your agreement with these statements:

a) I see myself as a Dundee University student.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

b) I am happy to be a Dundee University student.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

c) I feel connected to other Dundee University students.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

d) I identify with other Dundee University students.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

e) ‘Dundee University student’ is an important group for me.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

f) Being a Dundee University student is an important part of how I see myself.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

On the following four pages, you will find responses from four different University College Edinburgh students. They were given a large questionnaire to complete, which aimed to investigate University College Edinburgh students' opinions of Dundee University students. You have been given their responses from one section of this questionnaire.

Please read the responses carefully, and answer the questions that follow.

Please turn over >

Help-Seeking Meta-Stereotype Condition

(These were hand-written, and each was on a separate page)

Respondent 1: I guess I would say that my friends and I generally have this view that although Dundee students are really friendly, they don't tend to get as involved, academically speaking, as students from other Universities do, for whatever reason.

Respondent 2: I get the feeling that Dundee students are generally pretty bad at asking for help, which surprises me, as students really should do that. It's really bad for the whole University if students can't be bothered to ask for advice- you can only learn if you are willing to ask questions when you are given things you don't understand!

Respondent 3: I have heard that Dundee students have a great students' union and have a really good time. But I do know that some people in my class think that Dundee students are maybe not that dynamic.

Respondent 4: I once came over to a seminar at Dundee University, and none of us understood the topic at all. The Dundee University students sat in silence for ages, rather than admit that they were stuck. They left it up to me to ask the tutor to explain things more clearly. I thought that was a pretty selfish for the Dundee University students to do, as it disadvantaged everyone at the seminar- why are Dundee University students so unwilling to put their hands up?

Charity Meta-Stereotype Condition

(These were hand-written, and each was on a separate page)

Respondent 1: I guess I would say that my friends and I generally have this view that although Dundee students are really friendly, they don't tend to get as involved in charity events as students from other universities do, for whatever reason.

Respondent 2: I get the feeling that Dundee students are generally pretty tight-fisted, and not that generous with their money and time. I know they say that they are busy and don't have a lot of spare cash, but things will only improve if people are willing to help those less fortunate than themselves!

Respondent 3: I have heard that Dundee students have a great students' union and have a really good time. But I do know that some people in my class think that Dundee students are maybe not that dynamic.

Respondent 4: I visited some friends who go to Dundee University recently, and it happened to be Rag Week, where students are meant to help raise funds for charity. I was really struck by the lack of interest that the students showed for the event- nobody was really getting involved at all. I thought that was a pretty selfish thing for the Dundee University students to do, as it disadvantages everyone- why are Dundee University students so unwilling to help those in need?

Evaluation : Both Conditions

Please answer a few questions regarding your thoughts toward what you have just read:

1a) Overall, how fair/unfair do you find the University College students' comments?

Very unfair	1	2	3	4	5	6	7	Very fair
----------------	---	---	---	---	---	---	---	--------------

b) Overall, how legitimate/illegitimate do you find the University College students' comments?

Very illegitimate	1	2	3	4	5	6	7	Very legitimate
----------------------	---	---	---	---	---	---	---	--------------------

c) Overall, how hurtful do you find the University College students' comments?

Not hurtful at all	1	2	3	4	5	6	7	Very hurtful
--------------------------	---	---	---	---	---	---	---	-----------------

d) Overall, how insulting do you find the University College students' comments?

Not insulting at all	1	2	3	4	5	6	7	Very insulting
----------------------------	---	---	---	---	---	---	---	-------------------

e) Overall, to what extent do the University College Edinburgh students' comments damage the reputation of Dundee University students?

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

f) Overall, how judgemental do you find the University College Edinburgh students who made these comments?

Not judgemental at all	1	2	3	4	5	6	7	Very judgemental
------------------------------	---	---	---	---	---	---	---	---------------------

g) Overall, how motivated would you be to disprove the University College Edinburgh students' comments?

Not motivated at all	1	2	3	4	5	6	7	Very motivated
----------------------------	---	---	---	---	---	---	---	-------------------

Please turn over >

2a) Where do you expect the average overall academic performance of Dundee University students to be, compared to University College Edinburgh students?

Please circle the relevant statement:

Dundee University students' academic performance is...

20%	15%	10%	5%	Same as	5%	10%	15%	20%
<u>worse</u>	<u>worse</u>	<u>worse</u>	<u>worse</u>	UCE	<u>better</u>	<u>better</u>	<u>better</u>	<u>better</u>
than	than	than	than		than	than	than	than
UCE	UCE	UCE	UCE		UCE	UCE	UCE	UCE

b) In our society, different groups possess different levels of status.

Please indicate the relative status levels of Dundee University students and University College Edinburgh students by circling the statement that best describes Dundee University students' status:

Dundee University students' status is...

20%	15%	10%	5%	Same as	5%	10%	15%	20%
<u>lower</u>	<u>lower</u>	<u>lower</u>	<u>lower</u>	UCE	<u>higher</u>	<u>higher</u>	<u>higher</u>	<u>higher</u>
than	than	than	than		than	than	than	than
UCE	UCE	UCE	UCE		UCE	UCE	UCE	UCE

3. To what extent to you agree with the following statements?

a) University College students think that Dundee University students are reluctant to seek help.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

b) University College students think that Dundee University students are reluctant to give time and money to charity.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

10. University College students think that Dundee University students are fun-loving.

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

4. Finally, please create an identification code for yourself by filling in:

Your initials: ____

The year in which you were born: 19____

**You have now finished the questionnaire- many thanks for
your help.**

‘Study 2’: Both Conditions

(These items were presented to participants via computer)

A study of anagram-solving strategies

Thanks a lot for participating in our study. You will be using this computer to enter all of your answers, so that we can see and analyze your data. If you have any questions, please ask the Dundee University researcher in the room with you.

This study investigates the different strategies that people use to solve anagrams. Please answer the questions that follow. Press the ‘Continue’ button at the bottom right of the screen to move to the next page. If you make a mistake, press the 'Back' button at the bottom left of the screen to return to the previous question. Try to avoid changing your mind about answers though- we want to measure your initial reactions to the questions.

Thanks a lot for participating,

University College Edinburgh 4th Year Dissertation Students.



First, we would like to ask you a few questions about yourself and your puzzle-solving skills. Please enter the relevant answer/number for each question.

1. **Which University are you studying at? Your response will affect which questions we give you to answer.**
2. **Thank you. What course are you taking? If you study more than one subject, please list all of them, separated by commas.**
3. **How often do you attempt puzzles of some kind (e.g., sudoku, crosswords, etc.?)**
 Never 1 2 3 4 5 6 7 Every day
4. **How much do you enjoy thinking about and attempting puzzles?**
 Not at all 1 2 3 4 5 6 7 Very much
5. **In your opinion, how good are your puzzle-solving skills?**
 Very poor 1 2 3 4 5 6 7 Excellent
6. **How important do you think puzzle solving skills are?**
 Not at all 1 2 3 4 5 6 7 Very much

Thanks a lot for your answers- they are very useful. We are now going to give you the anagram task.

You will have one-and-a-half minutes to attempt the ten anagrams written on the sheet of paper beside you.

You may use pen and paper to help you, but please input your final answers here.

Please type 'xxx' for any anagrams that you cannot answer.

You may return to previous anagrams to change your answers, using the button at the bottom left of the screen.

Please tell the researcher with you when you are ready to start, and they will time you.

- 1. BKCLA**
- 2. LSNCPLEOKEG**
- 3. EGTGIALHINN**
- 4. EHNOY**
- 5. NCOIRANTA**
- 6. SESTAODRAKB**
- 7. PPPUY**
- 8. ONZICUMRI**
- 9. IRBESRESARP**
- 10. NRSATTUREA**

STOP- You have reached the end of the anagram task. Please wait until the researcher with you tells you what to do next (JW explained the help-seeking portion of the study).

One of the strategies that some people may use to help them solve anagrams is to ask for more information. You will now be able to fill out an assistance request form, indicating whether you would like to receive any assistance from us on any of the anagrams. We will be able to send back any assistance that you require.

Remember that you can ask for as much or as little assistance as you like.

Thanks,

University College Edinburgh 4th Year Dissertation Students.

1. BKCLA

0	1	2	3
None	A small hint	A large hint	Full answer

2. LSNCPLEOKEG

0	1	2	3
None	A small hint	A large hint	Full answer

3. EGTGIALHINN

0	1	2	3
None	A small hint	A large hint	Full answer

4. EHNOY

0	1	2	3
None	A small hint	A large hint	Full answer

5. NCOIRANTA

0	1	2	3
None	A small hint	A large hint	Full answer

6. SESTAODRAKB

0	1	2	3
None	A small hint	A large hint	Full answer

7. PPPUY

0	1	2	3
None	A small hint	A large hint	Full answer

8. ONZICUMRI

0	1	2	3
None	A small hint	A large hint	Full answer

9. IRBESRESARP

0	1	2	3
None	A small hint	A large hint	Full answer

10. NRSATTUREA

0	1	2	3
None	A small hint	A large hint	Full answer

Thank-you for your answers. The problem-solving task is now complete.

Whilst we are processing your requests for help and getting ready to send back any assistance that you require, please answer the following questions.

- 1. Were you aware of using any specific strategies during the anagram-solving task? If so, please describe them here. If you did not use any specific strategies, please just type 'none'.**

- 2. How would you describe your feelings at this moment? Please enter the relevant number:**

a)

Very bad	1	2	3	4	5	6	7	Very good
----------	---	---	---	---	---	---	---	-----------

b)

Very negative	1	2	3	4	5	6	7	Very positive
---------------	---	---	---	---	---	---	---	---------------

- 3. Please think about your feelings towards us (the University College dissertation students), and answer the questions that follow. Please answer honestly.**

a) How similar are we to you?

Not at all similar	1	2	3	4	5	6	7	Very similar
--------------------	---	---	---	---	---	---	---	--------------

b) How likely do you think it is that you would become good friends with us, if you met us?

Not at all likely	1	2	3	4	5	6	7	Very likely
-------------------------	---	---	---	---	---	---	---	----------------

c) How much would you like to socialise with us, if you met us (e.g., going to the pub or the cinema)?

Not at all	1	2	3	4	5	6	7	Very much
---------------	---	---	---	---	---	---	---	--------------

d) How much do you think you would like us, if you met us?

Not at all	1	2	3	4	5	6	7	Very much
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e) How similar is the Dundee University student researcher to you (i.e. – the person who brought you to the laboratory)?

Not at all similar	1	2	3	4	5	6	7	Very similar
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4. Please think about your feelings during the part of the anagram task where you asked us for assistance, and then circle the relevant number for each statement:

a) When I asked for assistance, I felt that I was acting:

Completely as an individual	1	2	3	4	5	6	7	Completely as a Dundee University student
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b) When I asked for assistance, I felt that I would be evaluated:

Completely as an individual	1	2	3	4	5	6	7	Completely as a Dundee University student
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c) When you asked us for assistance, to what extent did you feel that you were a representative of the group 'Dundee University students' interacting with representatives of the group 'University College students'?

Not at all	1	2	3	4	5	6	7	Completely
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d) When you asked us for assistance, to what extent did you feel that you were a unique individual interacting with other unique individuals?

Not at all 1 2 3 4 5 6 7 Completely

e) During this study, to what extent did you feel that seeking assistance would DAMAGE Dundee University students' reputations?

Not at all 1 2 3 4 5 6 7 Very much

f) During this study, to what extent did you feel that seeking assistance would IMPROVE Dundee University students' reputations?

Not at all 1 2 3 4 5 6 7 Very much

5. Please think about yourself as a Dundee University student, and rate the extent to which you agree with the statements below by circling the relevant number:

a) I see myself as a Dundee University student.

Not at all 1 2 3 4 5 6 7 Very much

b) I am happy to be a Dundee University student.

Not at all 1 2 3 4 5 6 7 Very much

c) I feel connected to other Dundee University students.

Not at all 1 2 3 4 5 6 7 Very much

d) I identify with other Dundee University students.

Not at all 1 2 3 4 5 6 7 Very much

e) 'Dundee University student' is an important group for me.

Not at all 1 2 3 4 5 6 7 Very much

f) Being a Dundee University student is an important part of how I see myself.

Not at all 1 2 3 4 5 6 7 Very much

6. Please think about yourself as a Dundee University student, and rate the extent to which you agree with these statements AT THIS MOMENT:

a) I am worried about whether Dundee University students (as a group) are regarded as a success or failure.

Disagree strongly 1 2 3 4 5 6 7 Agree strongly

b) I feel self-conscious about being a Dundee University student.

Disagree strongly 1 2 3 4 5 6 7 Agree strongly

c) I feel displeased with being a Dundee University student.

Disagree strongly 1 2 3 4 5 6 7 Agree strongly

d) I am worried about what other people think of Dundee University students (as a group).

Disagree strongly 1 2 3 4 5 6 7 Agree strongly

e) I feel that Dundee University students (as a group) are inferior to others at this moment.

Disagree strongly 1 2 3 4 5 6 7 Agree strongly

f) I feel concerned about the impression that Dundee University students (as a group) are making.

Disagree strongly 1 2 3 4 5 6 7 Agree strongly

g) I am worried about Dundee University students (as a group) looking foolish.

Disagree strongly 1 2 3 4 5 6 7 Agree strongly

7. Without checking or looking back, can you remember what University we are from?

St. Andrews _____
 Dundee _____
 University College Edinburgh _____
 Don't know _____

8. What do you think the purpose/aim of this experiment was? You can be as vague or as specific as you like.

9. Finally, please fill in:

The first initial of your first name:

The first initial of your last name:

The year in which you were born:

19_____